

MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS



PERIODICAL ROOM
UNIV. OF MICH.

High Scalers Removing Rock, Parker Dam

Photo by courtesy of Bureau of Reclamation

this issue . . . Alien Legislation in United States • Earnings
and Hours in Iron and Steel Industry • Food
Expenditures • Union Agreements in Aircraft

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MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

***** + HUGH S. HANNA, EDITOR + *****

CONTENTS

August 1940 Vol. 51 No. 2

Special articles:

	Page
Legislation regarding aliens in the United States.....	245
Food expenditures of wage earners and clerical workers.....	250
Progress of public housing in the United States.....	267
Annual wage and guaranteed employment plans in union agreements.....	283

Collective bargaining:

Union agreements in aircraft manufacture.....	290
---	-----

Wartime labor policies:

Canadian wartime labor policy.....	303
Canadian National Labor Supply Council.....	304
Wartime production and labor regulations in Italy.....	305

Employment and labor conditions:

Employment prospects in the tung-oil industry.....	308
Age and occupation of unemployed men in Great Britain.....	311
Labor developments in the Peruvian textile industry, 1940.....	312
Labor conditions in agriculture in East Prussia, Germany.....	313

Industrial relations:

Personnel policies in banks.....	315
Australian coal-mine strike settlement.....	320

Industrial safety and hygiene:

Injury experience in the iron and steel industry, 1938 and 1939.....	322
Agricultural Workers' Health and Medical Association, California.....	333
Voluntary medical service plan in Ontario.....	337
Safe concentrations of certain common toxic substances.....	338

Social security:

Placement work of public employment services, June 1940.....	340
Unemployment-compensation operations, June 1940.....	344

National income:

National income, 1929 to 1938.....	348
------------------------------------	-----

Negro in industry:

Negro youth in depression years.....	352
--------------------------------------	-----

Labor laws and court decisions:

Labor decisions of the Supreme Court, 1939-40.....	356
Consumers' cooperative law of the District of Columbia.....	365

Cost and standards of living:

The Bureau of Labor Statistics, new index of cost of living.....	Page 367
Trend of cost of living in Norway, 1938-40.....	405

Industrial disputes:

Trend of strikes.....	406
Strikes in April 1940.....	407
Activities of the United States Conciliation Service, June 1940.....	415

Minimum wages and maximum hours:

Continuance of existing basic workweek under wage and hour law....	417
Rest periods part of working time under wage and hour law.....	418
Minimum wage for British agricultural workers.....	418
Longer working hours in the Soviet Union.....	419

Wages and hours of labor:

Earnings and hours in the iron and steel industry, April 1938.....	421
Salaries of library employees, 1939.....	442
Wages and hours in the Puerto Rican coffee industry.....	446
Canada:	
Annual salaries and wages in manufacturing, 1937.....	448
Salaries in fire departments, January 1940.....	449
Denmark—Wages of industrial workers, 1939.....	452
El Salvador—Salaries of Government employees, 1939.....	452
Haiti—Wages, 1939.....	453

Family allowances:

Family allowances in United States Army and Navy in World War....	454
Netherlands Family Allowances Act, 1939.....	455
Family allowances in Spanish agriculture.....	457

Labor turn-over:

Labor turn-over in manufacturing, May 1940.....	459
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Trend of employment and pay rolls:

Summary of reports for June 1940.....	464
Detailed reports for business and industrial employment, May 1940..	470

Building operations:

Residential construction in the first quarter of 1940.....	481
Summary of building construction in principal cities, June 1940.....	487

Retail prices:

Food prices in June 1940.....	492
Electricity and gas—Prices changes between March and June 1940....	498
Soviet Union—Increase in food prices.....	500

Wholesale prices:

Wholesale prices in June 1940.....	502
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Labor conditions in Latin America..... 312, 452, 453**Recent publications of labor interest..... 507**

MONTHLY LABOR REVIEW

FOR AUGUST 1940

LEGISLATION REGARDING ALIENS IN THE UNITED STATES

Summary

THE most far-reaching legislation affecting aliens ever enacted in the United States is the Alien Registration Act of 1940.¹ This act requires the registration and fingerprinting of all aliens, and further strengthens the present law relating to their admission and deportation. At the time President Roosevelt signed this act, a statement was issued by him declaring that it should be interpreted and administered as a "program designed not only for the protection of the country but also for the protection of the loyal aliens who are its guests." He pointed out also that "the registration and identification of approximately three and one-half million aliens who are now within our borders does not carry with it any stigma or implication of hostility toward those who, while they may not be citizens, are loyal to this country and its institutions."

Most legislation regarding aliens, both by the States and by the Federal Government, has been for the purpose of granting preference in employment to citizens, especially on public works. In the past few years, Congress has prohibited the employment of aliens by certain Government agencies, such as the Work Projects Administration. Also the employment of aliens as seamen has been considerably restricted, and their employment by aviation factories producing airplanes for the Federal Government has been drastically limited.

Registration of Aliens

While the Federal Alien Registration Act of 1940 became effective June 28, 1940, for those aliens hereafter entering the United States, the sections relating to aliens already in this country did not become effective until 60 days later. All aliens now in the United States are required by the act to be registered and fingerprinted within 4 months

¹ Public Act No. 670, 76th Cong.

after August 27, 1940, except that aliens under 14 are required only to be registered. The registration work will be done at post offices, or such other places as may be designated by the Commissioner of Immigration and Naturalization. Information must be given under oath, and all registered aliens must notify the authorities of any changes of address. Penalties for violations of the act range from a fine of \$100 or imprisonment for 30 days, or both, to a fine of \$1,000 or imprisonment for 6 months, or both. In addition, an alien fraudulently registering may be deported.

The new registration act is the first peacetime Federal law requiring the registration and fingerprinting of all aliens. A few States have enacted legislation of this type, notably North Carolina² and Pennsylvania. The Pennsylvania statute³ was held unconstitutional by a United States District Court as a usurpation of "a power confided by the Constitution to the Federal Government."⁴ This decision will probably be reviewed by the Supreme Court. In Florida and Connecticut the Governor has been authorized under certain circumstances to require the registration of aliens.

Employment of Aliens

Considerable legislation has been enacted in the United States in the past few years restricting the employment of aliens. Most of these laws, however, relate to employment by the Government, its agencies, or by contractors performing work for the Government. A brief review of this type of legislation follows.

Public contracts.—By the provisions of an act of July 2, 1926,⁵ an alien employed by a contractor who is furnishing or constructing aircraft or aircraft parts or aeronautical accessories for the United States, may not be permitted to have access to the plans, specifications, or the work under construction or to participate in the contract trials without the written consent of the Secretary of the Department concerned. The recently enacted National Defense Act, approved on June 28, 1940,⁶ contains similar provisions in relation to the performance of secret, confidential, or restricted Government contracts. A violation of these provisions is punishable by a fine of up to \$10,000 or imprisonment up to 5 years, or both. Punishment has also been provided for an alien who obtains such employment by a willful misrepresentation of his alien status.

Seamen.—For many years it has been the policy of Congress to restrict the employment of aliens as seamen, and particularly as

² Code 1935, 193 (a)–193 (h).

³ Acts 1939, No. 304; see *Monthly Labor Review* for November 1939 (p. 1135).

⁴ *Davidowitz v. Hines*, 30 F. Supp. 470; see *Monthly Labor Review* for March 1940 (p. 669).

⁵ 44 Stat. L. 787, U. S. Code 1934, title 10, sec. 310 (j).

⁶ Public No. 671, 76th Cong.

officers of vessels. Thus, an early act⁷ provides that all officers of vessels of the United States who have charge of a watch, including pilots, must be American citizens. A later act⁸ requires that all licensed officers of vessels documented under the laws of the United States must be citizens. Citizenship is required of all the crew of a cargo vessel and of 90 percent of the crew of a passenger vessel in respect of which construction or operating subsidies have been granted. Another act⁹ provides that all licensed officers and pilots, as well as 75 percent of the crew, of United States vessels must be American citizens, unless the Secretary of Commerce finds that qualified citizen seamen are not available.

Public employment.—Until about 1937 the employment of aliens by the Federal Government was not absolutely prohibited. Under the Emergency Relief Appropriation Act of 1937¹⁰ the only aliens who could be employed on relief projects were those who had declared their intention to become citizens. Beginning with 1938, the relief acts have prohibited generally the employment of any aliens. The Emergency Relief Act of 1941,¹¹ for example, provides that no alien shall be given employment or continued in employment on any work project. Every employee must now make an affidavit that he is a citizen of the United States.

In the civil service of the United States employees are required to be citizens or to "owe allegiance to the United States." Unless specifically forbidden by statute, however, Government departments and agencies may employ aliens in noncivil-service positions. In the 1941 Labor-Federal Security Appropriation Act,¹² a limited number of interpreters who are not citizens may be hired in the Immigration and Naturalization Service under certain conditions.

The present Congress, however, strengthened these restrictions by inserting in a number of the appropriation acts special provisions regarding the employment of aliens. For example, the Labor-Federal Security Appropriation Act and the Appropriation Act for the State, Commerce, and Justice Departments¹³ prohibit the employment of aliens in the continental United States, except that persons already in the employment of the United States who have filed a declaration of intention to become citizens, or who owe allegiance to the United States, may retain their positions. Similar provisions are contained in the War Department Civil Appropriation Act, Independent Offices Appropriation Act, the Treasury and Post Office Appropriation Act, the District of Columbia Appropriation Act, and

⁷ U. S. Code 1934, title 46, sec. 221.

⁸ Supp. V to U. S. Code 1934, title 46, sec. 1132.

⁹ Supp. V to U. S. Code 1934, title 46, sec. 672a.

¹⁰ 50 Stat. L. 354.

¹¹ Public Res. No. 88, 76th Cong.

¹² Public No. 665, 76th Cong.

¹³ Public No. 508, 76th Cong.

the Interior Department Appropriation Act. The Military Appropriations Act and the War Department Civil Appropriation Act limit civilian employment on the Canal Zone in skilled, technical, administrative, executive, or supervisory capacity to citizens of the United States or of the Republic of Panama.

Private employment.—Outside of the restrictions as to the employment of aliens by contractors performing work for the United States, the Federal Government has enacted no legislation limiting alien employment in private industry, except in the case of seamen. It is of interest to note, however, that the Senate on May 27, 1940, passed the so-called Oppressive Labor Practices Bill, the main purpose of which is to eliminate the use of labor spies, strikebreakers, armed guards, and industrial munitions. There is contained in title 2 of this bill provisions limiting the employment of aliens by any person or corporation engaged in interstate or foreign commerce to 10 percent of the total number of employees, unless citizens are not available. The proposed legislation also provides that not more than 10 percent of the amounts paid to employees shall be paid to aliens. This legislation has not as yet been voted upon by the House of Representatives. Similar State legislation has been overruled by the courts as unconstitutional; in the case of *Truax v. Raich* (239 U. S. 33), the United States Supreme Court held invalid an Arizona statute requiring all business enterprises in that State employing 5 or more persons to employ at least 80 percent citizens.

State Legislation

In practically every State, laws have been passed barring aliens from certain occupations or otherwise discriminating against them. In employments on public works, particularly, this discrimination has been upheld by the courts on the ground that governments may employ or refuse to employ whomsoever they wish. Generally, the State laws grant preference to citizens in employment on public works, but in some cases preference is limited to residents of the State.

In approximately 10 States (such as Kentucky, Michigan, New York, South Dakota, and Virginia), architects must either be American citizens or have filed a declaration of intention. About the same number of States have similar requirements for engineers and surveyors, as in Nevada, New Jersey, New York, North Carolina, and Wyoming. In several of the mining States, principally Arkansas, Colorado, Illinois, Kansas, Montana, Pennsylvania, Utah, West Virginia, and Wyoming, supervisory employees (in mines) must be citizens. In a few States citizenship is required of certain salesmen (Michigan, New Jersey, Pennsylvania, Wyoming) and peddlers (Georgia, New Hampshire, Massachusetts, Pennsylvania). Other occupations and professions

that have a citizenship requirement include teachers, optometrists, barbers, undertakers, detectives, and insurance officers and agents.

Legal Aspects

What are the legal consequences of this type of legislation? It is a principle of American jurisprudence that aliens legally within the United States have a right to the equal protection of the law and thus may engage in gainful employment. The States heretofore have not attempted generally to prevent the employment of aliens in private industry. An Arizona law, as previously stated, has been held unconstitutional. In addition to this case there are many others, in which both the Federal and State courts have ruled on various phases of alien discrimination. In this connection it is of interest to note that recently a three-judge Federal Court consented to pass on the constitutionality of a Massachusetts law which requires that the district manager of a foreign insurance company must be an American citizen.

However, under the police power, it has been held that the States may deny to aliens the exercise of certain trades and professions on the ground that the exercise of such vocations is peculiarly subject to abuse.¹⁴ For this reason aliens are quite generally barred from certain professions by State legislation. Thus, almost all of the States require lawyers and certified public accountants to be citizens, and a number of States also do not permit aliens to become pharmacists or to practice medicine. However, in some of these States the restrictions do not apply to aliens who have declared their intention to become citizens.

¹⁴ See *Aliens and the Law*, by William M. Gibson, Chapel Hill, University of North Carolina Press, 1940.

FOOD EXPENDITURES OF WAGE EARNERS AND CLERICAL WORKERS ¹

FOOD means more than energy for the day to most of the 14,469 families covered in the Bureau's survey of the money disbursements of employed wage earners and clerical workers. Their three meals a day the year round necessarily follow more or less routine menus, but most of them were able to vary those menus with delicacies of one sort or another on holidays and Sundays. Some of them provide for the health and the future growth of their children as a matter of course, with milk, orange juice, and cod liver oil. To some of them, the food budget includes lunches in a restaurant or at a lunch counter for the gainfully employed, dinner downtown before the movies every once in a while, or supper at a roadside restaurant while the family is on an automobile trip.

The fact that most, if not all the families surveyed occasionally used some of their food money for something beyond the basic necessities does not, of course, imply that all of them could afford to secure a nutritionally adequate diet and still provide for other family needs. Although most of them bought enough food to keep them from feeling hungry, a large proportion did not spend enough to secure the amount and the kinds of food needed for good health for all the family and for normal growth of the children. More than a quarter of these families did not spend enough for food to secure the Bureau of Home Economics' "low-cost good diet" at the time the study was made.

Most families in the wage-earner and clerical group do not budget their expenditures in advance. It would be very difficult for many of them to do so because of the irregularity of their earnings. A large proportion of these families, however, budgeted their food expense. Their weekly food expenditures did not reflect the lower costs of the spring and summer months, but remained on the average remarkably constant from one season to the next.² The testimony of the field interviewers confirms the impression that most of the families surveyed reserved a definite sum after every pay day not only for rent (an amount fixed by contract) but also for food, fixed by family custom. Together these two items of inevitable expense take half of the average family's annual outlay.

Total Food Expenditure by Income Level

The average amount spent for food by the 14,469 families of wage earners and clerical workers, who provided the data for this report,

¹ Prepared by the Bureau's Cost of Living Division. Previous articles in this series have appeared each month since December 1939 in the Monthly Labor Review.

² Figures on total food expenditures by quarters for each city separately are available in the following bulletins: Nos. 636, 637, or 639 to 641.

amounted to \$508 for the year, 33.5 percent of total current expense. Among families with incomes from \$500 to \$600 (the lowest income class covered in the study), sums spent for food represented 38 percent of the current expenditure, and among families above the \$2,400 income level, 31 percent. Average food expenditure per family for the year rose from \$250 at the lower level to \$1,021 among families with incomes of \$3,000 and over (see table 1). The higher expenditure in the highest income class shown for these occupational groups is accounted for not only by the larger size of the family income, but also by the larger number of persons to be fed. The larger size of family at the higher income levels is connected with the fact that most of the larger family incomes in this group represent the earnings of more than one worker. Families in the \$3,000 and over income class averaged 4.27 persons over 16 years old; families in the \$500 to \$600 income class, only 2.26. The number of children per family was very slightly larger at the lowest as compared with the highest income level.

TABLE 1.—*Annual Food Expenditure, 14,469 Families in 42 Cities, by Income Level*

[Data cover 12 months within the period 1934-36]

Families with annual net income of—	Average food expenditure per family		Average number of food-expenditure units per family	Average expenditure per food-expenditure unit
	Amount	Percent of expenditure for all items		
All families.....	\$508	33.5	3.12	\$163
\$500 to \$600.....	250	38.4	2.66	94
\$600 to \$900.....	315	37.0	2.71	116
\$900 to \$1,200.....	398	35.8	2.90	137
\$1,200 to \$1,500.....	472	34.4	3.02	156
\$1,500 to \$1,800.....	540	33.3	3.12	173
\$1,800 to \$2,100.....	597	31.9	3.27	183
\$2,100 to \$2,400.....	683	31.7	3.58	191
\$2,400 to \$2,700.....	756	31.4	3.85	196
\$2,700 to \$3,000.....	837	31.0	3.88	216
\$3,000 and over.....	1,021	31.4	4.45	229

Differences in the customary food consumption of persons of different age, sex, and occupation have been estimated, measuring family size in each income class in food-expenditure units.³ On that basis, it is found that the average number of food-expenditure units per family at the highest income level was 67 percent greater than at the lowest. It is for this reason that the increase in unit food expenditure at successive income levels is not so large as the increase in food expenditure per family. The amount spent for food per adult-male equivalent⁴ rose from \$94 at the \$500 to \$600 income level to \$229

³ For the scale used in this measurement, see appendix G of any of the following bulletins: Nos. 636, 637, or 639 to 641.

⁴ Measured in food-expenditure units.

among families with incomes of \$3,000 and over, a sum only two and two-fifths as large, although income was six times as great and family food expenditure four times as large.

Total Food Expenditure by Income and Family Type

For families of any given size and composition, the decline in the percentage of total expenditure allotted to food as incomes increase is much more pronounced than when all families are considered together. Data from New York City, which have been tabulated separately for three family types, illustrate the difference between the place of food in the finances of families of three different sizes in successive income classes (see table 2). The percentage for families of only husband and wife dropped from 37.6 to 28.4 over the income span from \$600 to \$900 to the \$2,100 to \$2,400 level. These figures may be contrasted with the decline from 39.5 to 35.5 over the same income range for *all* families surveyed in New York.

Food expense necessarily forms a larger proportion of total expenditures for the larger families at a given income level. This explains why, in a group which includes larger families in the high than in the low income classes, as in table 1, there should be a relatively small decline in the proportion spent for food from the highest to the lowest income classes characteristic of the group.

TABLE 2.—*Percentage of All Current Expenditures Made for Food by Families of Three Types in New York City,¹ by Income Level*
[Data cover 12 months within the period 1934-36]

Families with annual net income of —	All families ¹	Families composed of—		
		Husband and wife only	Husband and wife and 1 child	Husband and wife and 2 to 4 children
\$600 to \$900.....	39.5	37.6	41.0	48.3
\$900 to \$1,200.....	37.5	34.1	37.2	41.4
\$1,200 to \$1,500.....	38.0	34.2	37.9	41.0
\$1,500 to \$1,800.....	37.3	32.9	34.9	39.1
\$1,800 to \$2,100.....	36.4	33.2	35.5	39.7
\$2,100 to \$2,400.....	35.5	28.4	34.6	35.2

¹ Note that families including more than 4 children and families including adults besides the husband and wife are included.

Total Food Expenditure at Different Consumption Levels⁵

When the amount spent for all items per adult-male equivalent is made the basis of the classification, and data are obtained on food expenditures at different consumption levels, the averages move quite differently from those secured when food expense is tabulated by family

⁵ The terms "consumption level" and "economic level" are used to denote classification of families by annual expenditure per unit for the total of all items of family expenditure. The unit used for this purpose is the equivalent adult male. Each member of the family, taking into account age, sex, and activity, is counted as the appropriate decimal equivalent of an adult male. For fuller explanation, see Chapter 4 of forthcoming Bulletin No. 638 or appendix G of any of the following bulletins: Nos. 636, 637, or 639 to 641.

income class. It will be remembered⁶ that families at the lower consumption levels in the wage earner and clerical group are, on the average, considerably larger than those at the higher levels. The large number of mouths to feed at the lowest consumption levels shown in table 3 results in a relatively high average food expenditure per family (\$414), but a low annual expenditure per adult-male equivalent (\$75). At the highest consumption level shown, food expenditure per family (\$612) was larger by almost one-half than the expenditure at the lowest level, but food expenditure per adult-male equivalent (\$322) was more than four times as large.

TABLE 3.—*Annual Food Expenditure of 14,469 Families in 42 Cities Combined, by Consumption Level*

[Data cover 12 months within the period 1934-36]

Families with total annual unit expenditure of—	Expenditure per family		Average size of family in food-expenditure units ¹	Expenditure per food-expenditure unit ¹
	Amount	Percent of total expenditure		
All families.....	\$508	33.5	3.12	\$163
Under \$200.....	414	43.7	5.53	75
\$200 to \$300.....	462	40.0	4.24	109
\$300 to \$400.....	492	37.4	3.55	139
\$400 to \$500.....	506	34.2	3.05	166
\$500 to \$600.....	519	32.7	2.72	191
\$600 to \$700.....	518	30.8	2.44	212
\$700 to \$800.....	535	29.6	2.29	234
\$800 to \$900.....	537	28.1	2.16	249
\$900 to \$1,000.....	560	27.1	2.08	269
\$1,000 to \$1,100.....	572	24.7	2.07	276
\$1,100 to \$1,200.....	625	25.6	2.04	306
\$1,200 and over.....	612	22.2	1.90	322

¹ For scale used in computing family size in food-expenditure units, see appendix G of any of the following bulletins: Nos. 636, 637, or 639 to 641.

FOOD EATEN AT LUNCH COUNTERS AND RESTAURANTS

The majority of the workers in these moderate-income families carry their lunches to work in discreet paper bags, in dinner pails, or in the more convenient lunch boxes fitted with a vacuum bottle for hot drinks in winter and cold ones in summer.

Thirty-seven percent, however, reported purchases of meals while at work by some member of the family during the year. The amount spent per family reporting such expenditure averaged slightly more than 26 cents a meal, if one assumes that one worker ate lunch at a restaurant or lunch counter 300 days per year. The proportion of families with workers who could allow themselves this sort of relaxation in the middle of the working day increased strikingly as the economic level of the families rose. In families spending less than \$200 to \$300 per adult-male equivalent for all items, only 18 percent reported expenditures for meals at work, but among families spending

⁶ See Income, Family Size, and the Economic Level of the Family, in January 1940 Monthly Labor Review.

\$1,000 or more per adult-male equivalent there were more than 60 per cent. The average amount spent per family reporting such expense also rose strikingly. It was almost three times as large at the highest levels as at the low.

TABLE 4.—*Expenditures for Food Prepared at Home, and Food Eaten at Restaurants and Lunch Counters, of 14,469 Families in 42 Cities, at Selected Consumption Levels*

[Data cover 12 months within the period 1934-36]

Item	All families	Families with total annual unit expenditure of—			
		\$200 to \$300	\$500 to \$600	\$800 to \$900	\$1,100 to \$1,200
Percentage of families in survey.....	100.0	12.2	15.8	4.6	0.8
Average number of food-expenditure units.....	3.12	4.41	2.72	2.16	2.04
Percentage of families spending for meals away from home:					
At work.....	37.0	20.9	40.1	48.9	66.7
At school.....	7.9	9.5	8.6	3.8	0
On vacation.....	10.2	2.5	10.8	22.8	37.9
Board at school.....	.4	.2	.5	.8	0
Candy, ice cream, drinks, etc.....	33.7	25.8	35.1	37.2	48.0
Percentage of families reporting food received as gifts, produced at home, or meals received as pay.....	28.0	32.3	25.2	25.3	31.4
Average annual expenditure per family for all food.....	\$507.72	\$478.47	\$518.54	\$537.12	\$624.76
Food prepared at home.....	461.17	458.39	469.05	460.20	488.43
Food bought and eaten away from home, total.....	46.55	20.08	49.49	76.92	136.33
Meals at work.....	29.08	12.19	31.39	46.71	81.53
Meals at school.....	2.35	2.57	2.76	.92	0
Other meals, not vacation.....	4.42	1.37	3.81	9.24	23.13
Meals on vacation.....	2.10	.32	2.13	5.27	13.29
Board at school.....	.64	.03	.82	1.90	0
Candy, ice cream, drinks, etc.....	7.96	3.60	8.58	12.88	18.38
Average estimated value per family of gifts of food and home-produced food and meals received as pay ¹	7.11	9.91	6.24	4.63	4.11

¹ The aggregates on which these averages are based do not include gifts of food received, food produced at home, and meals received as pay reported by 5.8 percent of the families for which they could not estimate the value.

Data presented in table 4 show the percentage of families reporting expenditures for meals of different kinds away from home, and average expenditures for all families combined and for families at certain consumption levels. In using this table, it is convenient to remember that the average income of the 14,469 families surveyed was \$1,524. Incomes of the families at the consumption levels specified averaged as follows:

Families with total annual unit expenditure of —	Income
\$200 to \$300.....	\$1,187
\$500 to \$600.....	1,596
\$800 to \$900.....	1,884
\$1,100 to \$1,200.....	2,262

Family size in food-expenditure units for given consumption levels is shown in table 4.

The amounts reported as spent for other meals away from home, and for candy, ice cream, and drinks purchased for consumption away

from home, were on the average small. Almost 34 percent of the families reported some expenditure for the three items last named, and the average amount spent during the year per family reporting such expenditure rose from not quite \$14 among families with a \$200-\$300 unit expenditure to \$38 among those with a \$1,100-\$1,200 unit expenditure.

AVERAGE EXPENDITURES FOR FOODS OF DIFFERENT TYPES

Expenditures for food in grocery stores and markets, dairies, delicatessens, and bakeries averaged \$461 for the year for these 14,469 families. The percentage distribution of this expenditure was as follows:

	Percent
Meat, fish, and poultry.....	24.1
Eggs.....	5.6
Milk and milk products ¹	12.7
Fats ¹	10.8
All fruits and vegetables.....	20.2
Citrus fruits and tomatoes.....	5.0
Green, leafy, and yellow vegetables.....	7.4
Potatoes.....	2.3
Other fruits and vegetables.....	5.5
Grain products.....	15.6
Sugar, sweets.....	3.7
Accessories.....	7.3
Total.....	100.0

¹ Cream and butter classified with fats.

As compared with wage earners and clerical workers covered in food consumption studies in other countries from 1928 to 1936, the families which supplied the data for this report devoted a relatively low proportion of their total food expenditure to cereal products (flour, meal, breakfast cereals, bread, and other baked goods) and a relatively high proportion to fruits and vegetables and meat. Consumption of milk by urban wage-earner and clerical groups in the United States appears to have been lower than in Finland, Sweden, Norway, Switzerland, and certain other North and Central European countries, according to the latest consumption statistics available. It was, however, considerably higher than in the countries of Southern Europe and South America for which data have been received here.

The distribution of actual food expenditures as shown above is in some ways quite different from that recommended by Sherman and Gillett for an economical and nutritionally adequate diet.⁷ The recommended distribution allocates 20 percent or more of the total food expenditure to milk and cheese, while the actual distribution shows less than 13 percent going to milk and milk products. The recom-

⁷ Sherman, H. C. *Chemistry of Food and Nutrition* (pp. 535-36). 5th ed. New York, 1937.

mended distribution allocates 20 percent or less of the total to meat, fish, and eggs, while the actual expenditures gave almost 30 percent to this group of foods. Twenty percent or more was recommended for bread and cereals, while the actual expenditure shows not quite 16 percent as spent for this group of foods. The proportion of the actual expenditure going to fruits and vegetables and to fats, sugar, sweets and other accessories was, however, very similar to that recommended for a low-cost diet which will provide the greatest advantage in terms of health and well-being.

The average food expenditure for the entire group was quite adequate to provide good nutrition. If all of the families covered had had as much to spend as this average, the adaptation of their food purchases to provide nutritionally adequate diets would have been a relatively simple matter. The average spent for food came to about \$2.70 per capita per week—approximately halfway between the sum needed to buy the "low-cost good diet" and the "moderate-cost good diet," of the Bureau of Home Economics, in cities above 50,000 population in 1935.⁸

It will be remembered that the food expenditures of these families were on the average approximately halfway between the cost, on the basis of 1935 prices, of the low-cost good diet and the moderate-cost good diet of the Bureau of Home Economics. When the allowances for milk and milk products and for fruits and vegetables in these diets are compared with actual average expenditures, it appears that actual milk expenditures were about 40 percent below the expenditure recommended in the low-cost diet, and 52 percent lower than that recommended in the moderate-cost diet. The actual expenditure for citrus fruits and tomatoes was between the allowances of these two diets, but the actual expenditure for green, leafy, and yellow vegetables and other vegetables and fruits was 28 percent below the allowance of the low-cost good diet and 51 percent below the allowance of the moderate-cost good diet.

AVERAGE EXPENDITURES FOR FOOD OF DIFFERENT TYPES, BY CONSUMPTION LEVEL

At the higher consumption levels covered in this investigation, expenditures per family for foods of all types are larger than at the lowest of the three consumption levels for which the detailed food consumption figures have been compiled.⁹ The distribution of food expenditures is, however, distinctly different from one consumption level to the next. Expenditures for meat, fish, and poultry, fruits and

⁸ For the most recent statement of the composition of these diets, see Stiebeling, H. K., and Clark, F.: *Planning for Good Nutrition*, U. S. Department of Agriculture Yearbook, 1939 (pp. 321-340).

⁹ These are families with total annual unit expenditures for all items of family living of "under \$400," "\$400 to \$600," and "\$600 and over."

vegetables, and accessories take a larger proportion of the total, and grain products and potatoes a considerably smaller proportion of the total at the highest than at the lowest level. The proportions going to milk and milk products, and fats, are also somewhat lower at the highest level.

TABLE 5.—*Percentage Distribution of Expenditures for Food to be Prepared at Home of 14,469 Families in 42 Cities Combined, by Groups of Items*

[Data cover 12 months within the period 1934-36]

Type of food	All families	Families with total annual unit expenditure of—		
		Under \$400	\$400 to \$600	\$600 and over
Annual per capita expenditure.....	\$128. 11	\$96. 76	\$139. 11	\$180. 90
Meat, fish, and poultry.....	24. 1	22. 4	24. 3	25. 6
Eggs.....	5. 6	5. 9	5. 5	5. 3
Milk, cheese, ice cream.....	12. 7	13. 7	13. 0	11. 2
Fats.....	10. 8	11. 0	10. 7	10. 8
Grain products.....	15. 6	18. 2	15. 0	13. 1
Citrus fruits and tomatoes.....	5. 0	4. 1	5. 2	5. 9
Green, leafy, and yellow vegetables.....	7. 4	6. 6	7. 6	8. 3
Potatoes.....	2. 3	2. 6	2. 2	2. 0
Other fruits and vegetables.....	5. 5	5. 0	5. 7	5. 9
Sugars and sweets.....	3. 4	3. 7	3. 4	3. 1
Miscellaneous.....	7. 6	6. 8	7. 4	8. 8
Total.....	100. 0	100. 0	100. 0	100. 0

The smaller proportion of the total going to expenditures for milk, cheese, and ice cream at the highest consumption level is accounted for by the smaller number of children at this level. Twenty-one percent of the adults in the families studied, but only 8.3 percent of the children, were found at the highest consumption level; only 46 percent of the adults, but 62 percent of the children, at the lowest level. Although many nutrition specialists recommend a quart of milk a day for persons of all ages, a majority of the scientists in the field regard a pint a day as adequate for an adult, and a quart for each growing child. Using the latter allowance as a standard, the milk purchases of families at the lowest of the three consumption levels met 37 percent of their needs, those of the middle group 50 percent, and of the highest group 63 percent.

Perhaps the most striking difference between food consumption at the three levels is the larger quantity of food purchased at the higher levels. Calculating purchases in terms of pounds purchased per food-expenditure unit (in order to take account of the smaller bulk consumed by children), the averages at the three levels are found to be 3.4, 4.2, and 4.9 pounds per food-expenditure unit per day. This difference is in part accounted for by the relatively large purchases of flour, cereals, and other grain products at the lowest consumption level. These are highly concentrated foods and there is

little waste in preparing them for the table. At the higher levels, purchases of fruits and vegetables are of greater importance and greater waste is involved in their use. Part of the difference in the quantity of food purchased is, however, accounted for by the fact that some of the families at the lowest economic level spent so little for food that they must often have gone hungry.

Per capita expenditure¹⁰ for food increased from \$1.86 per week at the lowest of the three consumption levels to \$3.48 a week at the highest, an increase of 87.1 percent. Some of the most important of the foods which showed relatively greatest increase are as follows:

	Percent of increase		Percent of increase
Cream.....	795	Tomatoes.....	325
Grapefruit.....	408	Ice cream.....	313
Fresh peas.....	356	Chicken, broiling.....	311
Lamb chops.....	332	Sirloin steak.....	266
Cakes.....	330		

Differences Between the Food Consumption of White and Negro Families

The outstanding difference in the average food consumption of the white and Negro families is due to the difference in their average incomes. The average number of persons per family was almost exactly the same in the two groups, but it will be remembered that the incomes of the Negro families in this group averaged \$1,008 per family, and those of the white families \$1,546, or more than 50 percent higher. (See footnote 6, p. 253.) The Negroes had much less money to spend on the average and they spent proportionately less for food. Expenditure for food per food-expenditure unit per year averaged \$111 for the Negro families and \$165 for the white families.

In view of the concentration of Negro families at the lower income levels, it was to be expected that they would, on the average, spend a higher proportion of their total expenditures for food. Actually the white families devoted 33.5 percent of their aggregate current expenditures to food; the Negro families, 34.6 percent. The difference in these percentages is less than might have been expected, due to the fact that Negro families of a given economic status spent less for food per adult-male equivalent than white families of the same status. This difference appears whether the white and Negro families

¹⁰ Since human needs for and customary consumption of foods of different types vary considerably for persons of different age and sex, it is impossible to compute any single measure of family size which will be appropriate for comparing the consumption of specific foods from one family to another. Children's need for milk is approximately twice as great as that of adults, while the need of heat-producing foods (starches and sugars) for adults is about twice as great as that of children. Children's consumption of meat varies from that of adults at a still different rate. In order to secure figures on quantities of individual foods purchased and on expenditures for individual foods which would provide a reasonably satisfactory basis for comparison and yet not present a misleading appearance of refinement, data on family purchases of individual foods have been converted to a per capita basis.

are classified by income level (see table 6) or by consumption level (see table 7).

TABLE 6.—*Annual Food Expenditures by Income Level, 12,903 White Families in 42 Cities and 1,566 Negro Families in 16 Cities*

[Data cover 12 months within the period 1934-36]

Families with total annual net income of—	White families					Negro families				
	Proportion of families	Food expenditure per family		Average number of food-expenditure units per family ¹	Average expenditure per food-expenditure unit ¹	Proportion of families	Food expenditure per family		Average number of food-expenditure units per family ¹	Average expenditure per food-expenditure unit ¹
		Average	Percent of total expenditure				Average	Percent of total expenditure		
All families.....	100.0	\$515	33.5	3.12	\$165	100.0	\$342	34.6	3.07	\$111
\$500 to \$600.....	.5	273	37.1	2.59	105	8.7	221	40.7	2.76	80
\$600 to \$900.....	7.1	323	37.1	2.67	121	35.2	279	36.8	2.89	97
\$900 to \$1,200.....	19.8	401	35.9	2.89	139	33.6	353	34.7	2.98	118
\$1,200 to \$1,500.....	24.2	473	34.5	3.01	157	13.7	417	32.0	3.21	130
\$1,500 to \$1,800.....	21.0	541	33.3	3.12	173	5.5	497	33.4	3.38	147
\$1,800 to \$2,100.....	15.7	597	32.0	3.27	183	² 3.3	² 643	² 29.3	² 3.99	² 161
\$2,100 to \$2,400.....	5.8	683	31.6	3.57	191	-----	-----	-----	-----	-----
\$2,400 to \$2,700.....	2.8	756	31.3	3.85	196	-----	-----	-----	-----	-----
\$2,700 to \$3,000.....	1.4	837	31.0	3.88	216	-----	-----	-----	-----	-----
\$3,000 and over.....	1.7	1,022	31.4	4.45	230	-----	-----	-----	-----	-----

¹ For scale used in computing family size in food expenditure units, see appendix G of any of the following bulletins: Nos. 636, 637 or 639 to 641.

² Figures apply to families with incomes of \$1,800 and over.

TABLE 7.—*Annual Food Expenditures by Consumption Level, 12,903 White Families in 42 Cities and 1,566 Negro Families in 16 Cities*

[Data cover 12 months within the period 1934-36]

Families with total annual unit expenditure of—	White families					Negro families				
	Proportion of families	Food expenditure per family		Average number of food-expenditure units per family ¹	Average expenditure per food-expenditure unit ¹	Proportion of families	Food expenditure per family		Average number of food-expenditure units per family ¹	Average expenditure per food-expenditure unit ¹
		Average	Percent of total expenditure				Average	Percent of total expenditure		
All families.....	100.0	\$515	33.5	3.12	\$165	100.0	\$342	34.6	3.07	\$111
Under \$200.....	2.3	443	44.3	5.71	78	18.1	328	41.5	5.01	65
\$200 to \$300.....	11.7	493	41.1	4.51	109	25.4	326	37.5	3.33	98
\$300 to \$400.....	19.7	500	37.5	3.60	139	22.1	332	34.7	2.62	127
\$400 to \$500.....	20.6	512	35.0	3.08	166	16.3	340	32.8	2.22	153
\$500 to \$600.....	16.1	523	32.7	2.74	191	9.3	362	30.1	1.78	203
\$600 to \$700.....	11.6	521	30.9	2.45	213	5.0	392	29.0	1.98	198
\$700 to \$800.....	7.4	535	29.6	2.29	234	² 3.8	² 469	² 26.6	² 2.06	² 228
\$800 to \$900.....	4.7	538	28.0	2.16	249	-----	-----	-----	-----	-----
\$900 to \$1,000.....	2.7	562	27.2	2.08	270	-----	-----	-----	-----	-----
\$1,000 to \$1,100.....	1.4	572	24.6	2.07	276	-----	-----	-----	-----	-----
\$1,100 to \$1,200.....	.8	624	25.5	2.04	306	-----	-----	-----	-----	-----
\$1,200 and over.....	1.0	612	22.2	1.90	322	-----	-----	-----	-----	-----

¹ For scale used in computing family size in food expenditure units, see appendix G of any of the following bulletins: Nos. 636, 637, or 639 to 641.

² Data apply to families with total annual unit expenditure of \$700 and over.

This lower expenditure by the Negro families is partly accounted for by the fact that the Negro group has become accustomed to using less expensive cuts of meat and less expensive vegetables than the white group. Another factor is that the Negro families eat in restaurants and lunch rooms less than the white families. Average expenditures for meals away from home by Negro families were one-half to one-sixth lower than those of white families at the same consumption level, except for families at the lowest level for which separate figures are available. At this lowest plane, the white families averaged \$11 per year per family for food at restaurants and lunch counters, while the Negro families averaged \$13.

The distribution of average expenditures for food by all the white families surveyed and all the Negro families, shown in table 8, reveals that the white families devoted a larger proportion of their total food expenditures to milk and milk products, to citrus fruits and tomatoes, and to "other" fruits and vegetables; the Negro families a larger proportion to fats, to green, leafy, and yellow vegetables, and to potatoes.

TABLE 8.—Percentage Distribution of Expenditures for Food Prepared at Home, by Groups of Items, 12,903 White Families in 42 Cities and 1,566 Negro Families in 16 Cities

[Data cover 12 months within the period 1934-36]

Type of food	White families				Negro families			
	All families	Families with total annual unit expenditure of—			All families	Families with total annual unit expenditure of—		
		Under \$400	\$400 to \$600	\$600 and over		Under \$400	\$400 to \$600	\$600 and over
Annual per capita expenditure.....	\$129.87	\$98.52	\$139.28	\$181.15	\$89.00	\$74.07	\$131.57	\$160.49
Meat, fish and poultry.....	24.1	22.4	24.3	25.6	25.4	24.0	27.1	29.4
Eggs.....	5.6	5.9	5.5	5.3	5.1	4.8	5.6	5.4
Milk, cheese, and ice cream.....	12.8	14.0	13.0	11.2	8.6	8.9	7.8	9.0
Fats.....	10.7	10.7	10.6	10.7	15.3	15.8	15.1	12.8
Grain products.....	15.6	18.3	15.1	13.1	16.1	17.4	14.1	11.6
Citrus fruits and tomatoes.....	5.1	4.2	5.3	6.0	3.2	2.7	3.9	4.8
Green, leafy, and yellow vegetables.....	4.7	4.3	4.9	5.2	6.7	6.5	7.0	7.9
Potatoes.....	2.2	2.5	2.2	2.0	3.4	3.7	3.1	2.7
Other fruits and vegetables.....	8.2	7.3	8.4	9.0	4.4	4.4	4.5	4.0
Sugar and sweets.....	3.4	3.6	3.4	3.1	4.6	5.0	4.2	3.2
Miscellaneous.....	7.6	6.8	7.4	8.8	7.2	6.8	7.3	9.2
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

When the comparison is made in terms of the distribution of expenditures by families of whites and Negroes spending \$400 to \$600 per expenditure unit, another type of difference appears. Most of the Negroes in the United States either live in the South or are the children of parents who were born and brought up in the South. The

food-consumption habits of the Negro group as a whole are much more influenced by the habits of the South than are those of the white group as a whole. The food expenditures of the Negroes at the \$400 to \$600 unit-expenditure level differ from those of the white families at that level in that a larger proportion of the total was spent by the Negroes for lean meat, fish and poultry, for fats, for potatoes (particularly sweetpotatoes), and for sugars and sweets. A smaller proportion of the total went to milk and milk products, to grain products, to citrus fruits and tomatoes, and to "other" vegetables. The proportion spent for green and leafy vegetables, eggs, and accessories was approximately the same for the two groups.

The Negroes' expenditure for milk was low partly because of the fact that more Negroes than white use evaporated milk, which is cheaper than fresh milk in urban communities, and partly because the Negroes on the average consume less milk than the whites. They also consume less butter, relying more on salt pork, bacon, and other fats. Stiebeling and Phipard found that "the large quantities of vitamin A rich vegetables eaten in the South compensate in large measure for the rather low butter consumption."¹¹

The tendency of the Negro group to spend less per pound of food purchased is well illustrated by data from white and Negro families in New York City, both from groups with unit expenditure of \$400 to \$600 for all consumption goods.

TABLE 9.—*Per Capita Purchases of Food to be Prepared at Home, New York City Families With Total Annual Unit Expenditure of \$400 to \$600*

[Data cover 1 week within the period 1934-36]

Type of food	White families ¹			Negro families ²		
	Food purchased		Average price per pound (in cents)	Food purchased		Average price per pound (in cents)
	Pounds	Cents		Pounds	Cents	
Grain products.....	4.584	49.4	10.8	4.437	39.1	8.8
Eggs.....	.633	17.1	27.0	.683	16.6	24.3
Milk and milk products ³	7.048	46.8	6.6	3.807	28.0	7.4
Fats ³.....	.773	27.5	35.6	1.028	29.2	28.4
Meat, poultry, and fish.....	2.871	84.6	29.5	3.722	85.9	23.1
Fruits and vegetables.....	10.530	66.1	6.3	10.137	49.7	4.9
Sugars and sweets.....	1.089	7.5	6.9	1.626	9.2	5.6
Accessories.....		20.3			19.9	
Total.....		319.3			277.6	

¹ Data apply to the winter quarter only.

² Data apply to an average for 1 week in each of 4 quarters.

³ Butter and cream classified with fats.

For each type of food except milk and milk products, the Negro families spent less per pound than the white families. The one ex-

¹¹ Stiebeling, H. K., and Phipard, E. F.: *Diets of Families of Employed Wage Earners and Clerical Workers in Cities*. U. S. Department of Agriculture, Circular No. 507.

ception is accounted for by the fact that the white families devoted a larger proportion of their expenditure for this group of items to fresh milk and less to evaporated milk, cheese, and ice cream.

The lower per capita expenditure for grain products by the Negroes is due to the fact that they bought less baked goods than the white families, but purchased more of their grain products in terms of flour and meal. Lower costs for fats are explained by smaller purchases of butter and greater reliance on salt pork and bacon. In the vegetable group, the difference is due in part to larger purchases of cabbage, collards, and kale, and smaller purchases of more expensive vegetables by the Negro group. It is clear that in these differences between the food purchases of white and Negro families in New York City, the Negroes definitely show the influence of Southern consumption patterns. The influence of the South is even more apparent when one analyzes the purchases of lean meat, fish, and poultry by these two New York City groups.

TABLE 10.—*Per Capita Purchases of Lean Meat, Poultry, and Fish to be Prepared at Home, New York City Families With Total Annual Unit Expenditure of \$400 to \$600*

[Data cover 1 week within the period 1934-36]

Type of food	White families		Negro families	
	Pounds	Cents	Pounds	Cents
Beef.....	0.718	22.2	0.386	8.9
Veal.....	.231	6.9	.082	2.3
Lamb.....	.313	9.1	.498	11.9
Pork.....	.288	7.9	.771	17.7
Miscellaneous meats.....	.159	6.3	.185	4.2
Poultry.....	.775	23.1	1.221	32.8
Fish.....	.387	9.1	.579	8.1
Total.....	2.871	84.6	3.722	85.9

The larger purchases of pork, poultry, and fish combined with smaller purchases of beef and veal by these New York City Negro families is reminiscent of the food-consumption habits which prevail throughout the South. The slightly larger purchases of lamb by the Negro families are not, however, typical of the South. Lamb consumption in that region is not, in general, as high as it is in other parts of the country.

Variations in Food Consumption Habits from City to City

The persistence of Southern food-consumption habits among Negro families in New York City, who have been away from the South, some of them, for more than a generation, is but one aspect of the general tendency toward individuality in food consumption which appears throughout the data collected in this investigation. The pattern of the food purchases among wage earners and clerical workers differed

greatly from city to city.¹² This would not have been so remarkable two generations ago, when a large proportion of American wage earners were newly arrived from European countries with distinctly different food habits. However, today, the greater part of the foreign-born have been here for 25 years. One might have expected a very considerable uniformity in the average food purchases of the wage-earner and clerical group as a whole at the present time, at least if one had judged from the general uniformity in types of clothing worn from city to city within the same region. As a matter of fact, however, differences in food consumption inherited from the colonial period still persist in certain parts of the country. Perhaps the most striking instance of this sort appears in the case of New Orleans and Birmingham. In New Orleans, customs inherited from the French still prevail to a considerable extent in matters pertaining to food.

The food consumption of the white wage-earner and clerical group in Birmingham is, however, considerably influenced by the foods available in the South Appalachian Mountains from which many of Birmingham's white workers have migrated. As a result, expenditures for pork products are much higher in Birmingham, and for veal, poultry, and fish, much higher in New Orleans. Expenditures for green vegetables, salad oils, and salad dressing are much larger in New Orleans. The amounts spent for white flour and corn meal are considerably larger in Birmingham, while those for white bread, spaghetti, and noodles are higher in New Orleans. Although average incomes among the white group were higher in Birmingham, the white group in New Orleans on the average spent more for food.

Nutritional Adequacy of the Diets

A calculation of the proportion of families spending enough to buy the "low-cost good diet" of the Bureau of Home Economics indicates that 75 percent of the white families and 32 percent of the Negro families made such expenditure. There is a striking progression in the proportions from the families with unit expenditures of less than \$400 to those spending \$600 or more.

In making these estimates, the cost of the "low-cost good diet" was calculated on the basis of average prices in the period to which the expenditure data apply in each city surveyed. It is, of course, possible to shop with care and buy at lower prices than these. A careful selection of in-season fruits and vegetables and fish will lower the cost, but on the other hand, to secure a nutritionally adequate diet at the

¹² A statistical test of the significance of the difference in food consumption between different cities in the same region was conducted by comparing expenditures on about 100 specific foods for the following pairs of cities: Cleveland-Cincinnati; Dallas-Houston; Kansas City-St. Louis; and San Diego-Los Angeles. For each pair, the test showed that the difference between the two patterns of food consumption was sufficiently large to make it extremely unlikely that the differences could be attributed to the fluctuations of random sampling.

calculated cost requires thoughtful planning and food-consumption habits which follow nutritional needs very closely. These figures furnish, therefore, an estimate of the proportion of families spending enough to secure nutritionally adequate food; they do not furnish information as to the proportion of families actually attaining adequate diets. The following statement shows the percentage of families spending enough for food to buy the "low-cost good diet," of the Bureau of Home Economics, by unit expenditure for all items.

Unit expenditure for all items:	Percent of—	
	White families	Negro families
All families.....	75	32
Less than \$400.....	40	11
\$400-\$600.....	88	¹ 73
\$600 and over.....	98	--

¹ Families with unit expenditure of \$400 and over.

A detailed analysis of food-consumption records kept for 1 week in several seasons by a sample of approximately 4,000 of the families cooperating in the present investigation was made by Stiebeling and Phipard.¹³ The diet as shown by these records were classified as good or fair if the uncooked food materials consumed furnished per nutrition-requirement unit at least the following quantities:

Specifications for diets rated good and fair; daily allowances of certain important nutrients per day for a 154-pound moderately active man.

Nutrient	Good diets	Fair diets
Protein: grams.....	67	45
Calcium: grams.....	0. 68	0. 45
Phosphorus: grams.....	1. 32	0. 88
Iron: milligrams.....	15	10
Vitamin A: International units.....	6, 000	3, 000
Vitamin B ₁ : International units.....	500	250
Ascorbic acid: milligrams.....	75	37
Riboflavin: Sherman units.....	600	300

Their analysis shows from 11 to 21 percent of the white families in the several regions, and 11 percent of the Negro families in the South, consuming food which, as uncooked food material, provided generous quantities of protein, calcium, phosphorus, iron, and vitamins A, B, ascorbic acid, and riboflavin. These included a wide margin of safety, probably about 50 percent above average minimum requirements for protein and the minerals, and a wider margin, as much as 2 or 3 fold, for the vitamins. These generous margins provide not only for some waste in use but also for the higher than average requirements of some individuals and the fact that more than the

¹³ See footnote 11, p. 261.

minimum quantities of certain nutrients needed for growth or equilibrium appears to be advantageous.

The percentage of the families in this sample, whose diets were classified as fair and poor, are shown in table 11. Stiebeling and Phipard found that "The chances for better diets increased with rising per capita expenditures for foods. This was due chiefly to a more liberal use of milk, meat, eggs, leafy, green vegetables, and fruits, when more money was available. But the quality of the food supply selected by families was by no means only a matter of level of food expenditure. At every expenditure level above a certain minimum, some families succeeded in obtaining good diets but others procured food only fair or poor, from the standpoint of nutritive value. For example, with an expenditure of \$2.50 a person a week for food, 32 percent of the families in East South Central cities bought good diets, while another 37 percent obtained diets that were classed as poor"¹⁴ (that is, in need of improvement, since they were below, in one or more respects, what is now considered average minimum requirement).

TABLE 11.—*Proportion of All Families Studied Obtaining Diets of Different Grade, by Color of Family and Region*

Color of family and region	Proportion obtaining diets graded—		
	Good	Fair	Poor
White:	Percent	Percent	Percent
North Atlantic.....	11	32	57
East North Central.....	12	28	60
East South Central.....	21	33	46
Pacific.....	14	46	40
Negro: South.....	11	25	64

In summarizing their findings, Stiebeling and Phipard estimate that there is little likelihood of a deficiency in protein in the diets of many employed workers' families. Most of the diets furnished an adequate amount of phosphorus. Less than a half, however, purchased food supplying as much as 0.70 gram or more of calcium per unit per day (a safe allowance), while about a sixth had diets furnishing less than the average minimum requirement of 0.45 gram of calcium per unit per day. About half the diets supplied 15 milligrams of iron per unit per day (the amount needed for a "good diet"), and all but about 5 percent, a "fair" allowance, 10 milligrams.

About a third of the families obtained diets high enough in vitamin A to insure good visual adaptation in semidarkness, and about a fifth obtained a liberal allowance. About half the families purchased foods which furnished less vitamin B₁ than the standard of the good diet for this nutrient. An abundance of vitamin B₁ promotes good

¹⁴ See footnote 11, p. 261.

functioning of the digestive tract. Acute deficiencies result in a disease of the nervous system called beriberi.

Somewhat less than half of the families secured the specifications of the good diet as regards vitamin C (ascorbic acid), a substance found in abundance in citrus fruits and tomatoes and in certain green and leafy vegetables and fruits, but almost 90 percent had a "fair" allowance. Diets without sufficient provision of this nutrient result in increased susceptibility to infection, and in restlessness and irritability in children. An acute deficiency in vitamin C may produce scurvy, but other symptoms are more common in this country. Riboflavin (essential in the production of an enzyme involved in cell respiration and the energy metabolism of the body) was fairly well supplied by these diets. The pellagra-preventive factor was apparently amply supplied except in the Southeast, where the deficiency among the low-income groups is serious.

Deficiencies in the consumption of calcium and vitamins A, B, and C are readily understood when the division of actual expenditure is compared with recommendations for adequate nutrition at expenditure levels just above and just below the average prevailing in this group. Milk is one of the most important sources of calcium and of vitamins A and B. The relatively low proportion of the average allotted to milk and milk products is responsible in large part for these deficiencies. The deficiency which appears in the analysis as regards vitamin C is probably accounted for by the fact that actual purchases of green and leafy vegetables were considerably below those in the recommended diets.

The relationship between food consumption and health is now so well established that it must be a matter of general concern that so large a proportion of this relatively favored group was not securing the foods needed for a nutritionally satisfactory diet. There is abundant clinical evidence that the vitamins and the minerals listed above are needed for physical well-being. Part of the consumption deficiencies just shown could easily be remedied by more widespread knowledge of nutritional needs, but a large part is due to the inadequacy of incomes to meet total family needs. As noted in an article previously published in this series,¹⁵ 44 percent of the children in the families of the employed workers covered by this investigation were members of families whose expenditures did not come up to the modest standard of the WPA "maintenance budget."

¹⁵ *Monthly Labor Review*, January 1940.

PROGRESS OF PUBLIC HOUSING IN THE UNITED STATES

By Margaret H. Schoenfeld, Bureau of Labor Statistics

THE problem of housing workers employed in munition works, airplane factories, and shipyards has created new demands on the Federal Government to furnish funds for low-cost dwellings. A similar situation faced the Government in 1917-18, when, because of the war, employment in individual plants was expanded to such an extent that available housing in many localities was insufficient for the personnel. An important difference is that experienced public housing agencies are ready to deal with housing shortages that develop at this time, while in the war period it was necessary to adopt legislation and to establish special administrative machinery before actual planning, land purchase, and building could be undertaken.

As there is likely to be considerable redirection of the Federal housing program in the coming months, this seems a suitable time to give a general review of Federal activities in the field of low-cost housing, as well as to describe the current needs and developments in the present emergency.

Emergency Program of 1940

A beginning has already been made in meeting emergency housing requirements. By the terms of title II of Public Act No. 671 (76th Cong., 3d Sess., ch. 440) approved June 28, 1940, to expedite national defense, and for other purposes, the Navy and War Departments and the United States Housing Authority are authorized to cooperate in making necessary housing available for persons engaged in national-defense activities. Projects may be initiated by the Navy or War Department to provide dwellings on or near naval or military reservations, posts, or bases, for rental to enlisted men with families and to employees of the Navy and War Departments assigned to duty at the reservation, post, or base. Such projects may be developed by either department or by the USHA, whichever the President determines is best suited to carry on the task. The USHA has already entered loan contracts for 11 defense housing projects.

In any localities where the President determines that an acute housing shortage exists, which impedes the national defense and where the necessary housing would not otherwise be provided for persons engaged in national-defense activities (which includes not only military and naval personnel but also workers in national-defense industries), the USHA may undertake the development and administration of projects or may extend financial aid to public housing agencies for this purpose, in accordance with the terms of the United States Housing Act of

1937, as amended. Projects furnished under the defense program by the three responsible Federal agencies are not subject to some of the provisions established for other projects which would retard the speedy furnishing of needed housing or which are inconsistent with housing for national-defense purposes, such as the requirement that a slum dwelling must be eliminated for each new unit built or that any part of the development cost must be met in any manner other than from funds loaned or furnished by the USHA.

Any of the funds or authorizations made available to the USHA previous to the adoption of this new legislation (title II of Public Act No. 671) or later placed at the disposal of the USHA may be used for this work. The USHA may, therefore, use any funds available from its original \$800,000,000-loan authorization for this work. This loan authorization, however, is limited by the amount of annual contributions available to service the projects for which loans are made. The present limitation upon the amount of annual contributions which can be contracted for by the USHA (\$28,000,000) permits an annual contribution which will service a construction program of approximately \$770,000,000. Since the USHA loan is limited to 90 percent of the cost of a project, a construction program of \$770,000,000, taking into consideration the necessary local participation in development cost and a margin of safety, would involve USHA loans of only approximately \$684,000,000. Taking into consideration the fact that some local housing authorities have been able to furnish more than the required local participation, the USHA, out of its original loan authorization, will have approximately \$150,000,000 available for loans to local authorities, if and when Congress authorizes additional annual contributions to match these available loan funds. These additional annual contributions are provided for in S. 591 as passed by the Senate. This bill (S. 591), which is now pending before the House of Representatives, also carries an additional loan authorization of \$800,000,000 and an additional annual contribution authorization sufficient to service the projects that would be assisted with these additional loan funds. A substitute bill, as reported by the House Banking and Currency Committee, would provide no new loan funds but would provide an additional authorization for annual contributions of \$5,000,000 per annum.

Early Experience

Experience with public housing in the United States began in 1917, when this country entered the World War. As part of its war program the Government undertook a certain amount of house building in overcrowded industrial centers where large numbers of men were employed in producing war goods, such as munitions and ships. Two Federal agencies were concerned with this work.¹

¹ For a fuller description of this housing program, see *Monthly Labor Review*, July 1940.

One was the United States Housing Corporation in the Department of Labor, which carried out 40 housing projects in 26 localities. These were owned, built, and managed by the Government, and provided living accommodations for about 6,000 families and 8,000 single men and women. After the war various Government agencies took over 452 units and the remainder were sold to private individuals.

Wartime housing projects of the United States Shipping Board—the other agency concerned with such activities—were constructed at 25 shipyards and 1 turbine plant. In all, 28,064 men were housed in 8,644 houses, 6 boarding houses, 849 apartments, 94 dormitories, and 5 hotels.

Construction of these dwellings served the twofold purpose of increasing available housing and of showing how the design and livability of low-cost housing could be improved. However, when the war emergency ended the Government withdrew from the low-cost housing field, at a time when many other countries were initiating public housing as a post-war reconstruction measure.

In the years following, the need for low-cost housing, while recognized by certain groups, was in large part lost sight of because of the boom in private-house construction.

Beginning in 1929 residential building construction began to lag. When the Reconstruction Finance Corporation was created in 1932 new building was practically at a standstill, and to encourage such building the Corporation was empowered to issue self-liquidating building loans for limited-dividend projects subject to State or municipal control. The State of New York had created a housing agency—the New York State Housing Board—and Federal officials believed that there would be a growing demand for funds as other States and municipalities established similar bodies to promote house construction under the limited-dividend principle.

But the anticipated demand for housing loans did not materialize and no such loan was made until 1933. This was for the construction of Knickerbocker Village on a slum block of the lower East Side of New York City and under the authority of the New York State Housing Board. Knickerbocker Village was built at a cost of \$9,500,000 (loan, \$8,022,000) and consists of 1,593 dwelling units. It was designed primarily for the use of white-collar workers. Monthly rentals average \$12.50 per room, although a number of 2½-room apartments rent for as little as \$22.50.

Distress among home owners led to enactment of the Home Owners' Loan Act in June 1933. The Home Loan Bank System had already been established to facilitate payment of mortgage debts by home owners, but the situation had become so critical that action

was required to prevent continuance of mass foreclosures of mortgages and sales of properties for taxes. This work was entrusted to the Home Owners' Loan Corporation. Provision was made for amortizing loans over 15 years at an interest rate of 5 percent.

During the emergency the Corporation loaned \$3,093,000,000, of which approximately \$2,750,000,000 was disbursed in exchange for defaulted mortgages and the balance was used for taxes, reconditioning, and loan costs. At the end of 1939 a total of 156,885 properties, representing 15 to 16 percent of the homes on which mortgages were refinanced, had been acquired by the HOLC. Lending operations ceased on June 12, 1936, and the Corporation is now engaged in servicing its loans and managing and selling its acquired properties.

A public subsidized low-rent housing program was also initiated in 1933 as part of the public-works program. Provision for the "construction, reconstruction, alteration, or repair under public regulation or control of low-cost housing and slum-clearance projects," was written into title II of the National Industrial Recovery Act. A special division was formed in the new Public Works Administration of the Department of the Interior to promote house construction.

In an effort to create employment as quickly as possible, it was decided to make loans to limited-dividend corporations to build low-cost dwellings. Among hundreds of applicants only 7 qualified for aid and the loan policy was soon abandoned. Direct construction by the PWA was substituted and when the control of subsidized housing was transferred to the USHA early in 1938, a total of 51 large-scale projects, consisting of nearly 22,000 dwelling units, were either occupied or nearing completion. The location of the projects, development cost, type of accommodations, number of living units, and average monthly shelter rent (i. e., not including utility charges) per room as of March 1940 for 48 of these projects, those in Puerto Rico and the Virgin Islands not being included, are shown in table 1.

TABLE 1.—Location, Costs, Size, Type, and Rents of PWA Housing Projects, March 1940

Location and name of project	Total development cost ¹	Number of units	Type of unit	Average monthly shelter rent per room ²
<i>Alabama</i>				
Birmingham: Smithfield Court.....	\$2,420,824	544	1- and 2-story row houses.....	\$2.87
Montgomery: Riverside Heights.....	408,155	100	do.....	3.18
Montgomery: Wm. B. Patterson Courts.....	503,307	156	do.....	2.44
<i>Connecticut</i>				
Stamford: Fairfield Court.....	825,777	146	3-story apartments; 1-and 2-story row houses.	3 6.19
<i>District of Columbia</i>				
Washington: Langston.....	1,744,177	274	3- and 4-story apartments; 2-story row houses; 2-story flats.	3 5.39
<i>Florida</i>				
Jacksonville: Durkeeville.....	916,846	215	1- and 2-story row houses.....	2.81
Miami: Liberty Square.....	908,704	243	do.....	3 3.48
<i>Georgia</i>				
Atlanta: Techwood Homes.....	2,619,403	604	3-story apartments; 2-story row houses.	4.52
Atlanta: University Homes.....	2,509,728	675	2- and 3-story row houses; 2- and 3-story flats.	3.11
<i>Illinois</i>				
Chicago: Jane Addams Houses.....	6,924,382	1,027	3-story apartments; 2-story row houses.	4.37
Chicago: Julia C. Lathrop Homes.....	5,570,305	925	3-story apartments; 2-story row houses; 2-story flats.	4.16
Chicago: Trumbull Park Homes.....	2,865,153	462	4-story apartments; 2-story row houses; 2-story flats.	4.88
<i>Indiana</i>				
Evansville: Lincoln Gardens.....	862,454	191	1- and 2-story row houses; 2-story flats.	3 4.53
Indianapolis: Lockefield Gardens.....	3,168,640	748	3- and 4-story apartments; 2-story row houses.	3.34
<i>Kentucky</i>				
Lexington: Blue Grass Park, Aspendale.....	1,610,161	286	1- and 2-story row houses.....	3 4.99
Louisville: La Salle Place.....	1,230,140	210	do.....	3.43
Louisville: College Court.....	719,093	125	2-story flats; 1- and 2-story row houses.	3.32
<i>Massachusetts</i>				
Boston: Old Harbor Village.....	6,244,688	1,016	3-story apartments; 2-story row houses	3 5.00
Cambridge: New Towne Court.....	2,373,652	294	3-story apartments.....	3 4.63
<i>Michigan</i>				
Detroit: Brewster.....	4,642,448	701	3-story apartments; 2-story row houses; 2-story flats.	3.92
Detroit: Parkside.....	4,175,656	775	do.....	5.31
<i>Minnesota</i>				
Minneapolis: Sumner Field Homes.....	3,476,573	464	do.....	3 4.43
<i>Nebraska</i>				
Omaha: Logan Fontenelle Homes.....	1,790,162	284	1- and 2-story row houses; 2-story flats.	3.53
<i>New Jersey</i>				
Atlantic City: Stanley S. Holmes Village.....	1,485,205	277	2- and 3-story row houses; 2- and 3-story flats.	3 5.96
Camden: Westfield Acres.....	2,933,353	514	3-story apartments.....	3 4.89

See footnotes at end of table.

TABLE 1.—Location, Costs, Size, Type, and Rents of PWA Housing Projects, March 1940—Continued

Location and name of project	Total development cost ¹	Number of units	Type of unit	Average monthly shelter rent per room ²
<i>New York</i>				
Buffalo: Kenfield.....	\$4,502,757	658	3-story apartments; 2-story row houses; 2-story flats.	\$4.67
Lackawanna: Baker Homes.....	1,537,130	271	2-story row houses; 2-story flats.	³ 4.01
New York: Williamsburg Houses.....	12,917,362	1,622	4-story apartments.....	6.26
New York: Harlem River Houses.....	4,104,533	574	4- and 5-story apartments.....	5.92
Schenectady: Schonowee Village.....	1,350,992	219	3-story apartments.....	³ 4.84
<i>Ohio</i>				
Cincinnati: Laurel Homes.....	6,794,357	1,039	3- and 4-story apartments.....	³ 4.97
Cleveland: Cedar Central Apartments.....	3,312,734	650	3-story apartments.....	4.28
Cleveland: Outhwaite Homes.....	3,381,506	579	3-story apartments; 2- and 3-story row houses and flats.	4.01
Cleveland: Lakeview Terrace.....	3,684,305	620	2- and 3-story apartments; 2- and 3-story row houses.	4.12
Toledo: Brand Whitlock Homes.....	1,860,962	264	3-story apartments; 2-story row houses; 2-story flats.	4.84
<i>Oklahoma</i>				
Enid: Cherokee Terrace.....	538,640	80	1- and 2-story row houses.....	3.20
Oklahoma City: Will Rogers Courts.....	1,956,903	354	do.....	3.11
<i>Pennsylvania</i>				
Philadelphia: Hill Creek.....	1,971,317	258	1- and 2-story row houses; 2-story flats.	³ 4.67
Wayne: Highland Homes.....	336,903	50	2-story row houses; 2-story flats.....	³ 4.65
<i>South Carolina</i>				
Charleston: Meeting St. Manor, Cooper River Court.....	1,243,541	212	1- and 2-story row houses.....	³ 5.49
Columbia: University Terrace.....	662,031	122	3-story apartments; 1- and 2-story row houses; 2-story flats.	³ 3.57
<i>Tennessee</i>				
Memphis: Dixie Homes.....	3,237,016	633	1- and 2-story row houses; 2-story flats.	³ 3.98
Memphis: Lauderdale Courts.....	3,068,777	449	3-story apartments; 1- and 2-story row houses.	³ 4.97
Nashville: Cheatham Place.....	1,889,032	314	1- and 2-story row houses.....	3.90
Nashville: Andrew Jackson Courts.....	1,766,922	398	1- and 2-story row houses; 2-story flats.	2.97
<i>Texas</i>				
Dallas: Cedar Springs Place.....	948,378	181	2-story apartments; 1-story row houses; 2-story flats.	³ 6.78
<i>Wisconsin</i>				
Milwaukee: Parklawn.....	2,443,465	518	2-story apartments; 1- and 2-story row houses.	³ 5.93

¹ Includes the entire cost of project, cost of slum buildings torn down, cost of land acquired for future development, and the administrative charges allocated to the project.

² Shelter rents are based on the latest findings of the Administrator of the United States Housing Administration and generally exclude charges for project utilities.

³ Includes charge for water and a portion of the project utilities, such as hall lighting.

⁴ White families.

⁵ Negro families.

As a pioneer agency, numerous unforeseen problems hampered the PWA. In commencing slum-clearance operations, land was acquired by condemnation proceedings, as authorized by the terms of the National Industrial Recovery Act. In a test case, however, it was held that housing did not constitute a "public use" and, therefore, the right of eminent domain could not be exercised. To avoid the inevitable loss of time in assembling plots in slum areas by purchases

from owners selling voluntarily, the PWA then began to build on vacant sites. Also, assurance of local support was necessary before building in any community. Many additional questions arose as to costs, design, and planning. Nevertheless, buildings of high standard in design and practicability were erected.

The Federal Government's policy of initiating, constructing, and managing its own projects under PWA is explained by the situation existing when funds were made available for housing in 1933. The National Industrial Recovery Act required that employment be furnished as quickly as possible. At that time the United States lacked experience with public housing and, as neither the States nor municipalities had yet established their own housing authorities, there was no possible way of building speedily unless the Federal Government itself undertook the task. The position was greatly altered, however, when a few years later the USHA took over the PWA projects and received Federal funds for future building. By that time it had become possible for the Federal Government to discontinue direct construction.

United States Housing Authority

The United States Housing Authority was required by law to sell the PWA projects or lease them as soon as possible. At the end of 1939, 32 projects had been leased to local public housing agencies, 2 had been transferred to the Puerto Rico Reconstruction Administration, and the remaining 17 were being operated temporarily by the USHA. When the data in table 1 were compiled, the rentals in 24 projects had been reduced from the original levels established. Under the PWA, rentals were required to be fixed on a basis that would return to the Federal Government 55 percent of the project cost plus interest over a period of 60 years. Following an entirely different policy, the USHA was authorized to establish rentals at amounts necessary to pay management, operating, and maintenance costs, plus only such additional amounts as would be consistent with maintaining the low-rent character of the projects.

While the USHA, created under the terms of the United States Housing Act of 1937, was made responsible for the existing PWA projects, its major function was to administer a highly decentralized program to rehouse families of slum dwellers in the lowest income third of the population.

The USHA does not buy land, construct projects, nor assist private builders. It does make repayable loans to public housing agencies which meet the requirements established under the law, up to 90 percent of the total development cost of housing projects. The subsidy afforded is in the form of annual grants-in-aid to bring rents within the reach of the families for which the houses are intended.

Introduction of a procedure in 1937 requiring that the States and municipalities should initiate, construct, and manage their own projects shows the increasing recognition of public responsibility for supplying adequate low-rent dwellings. Prior to the enactment of the Reconstruction Finance Act of 1932, New York and Puerto Rico were the only jurisdictions making provision for public aid to low-cost projects. Ohio's limited-dividend corporation law of 1932 was the next to be adopted. In mid-1940 a total of 450 localities in 37 States, the District of Columbia, Puerto Rico, and Hawaii had housing authorities engaged in investigating housing conditions and either planning for or engaging in the betterment of housing conditions.

Owing to inherent characteristics of the construction industry, there is inevitably a considerable lag between the time when applications for assistance are received and approved, and construction of dwellings is begun and completed. In the early experience under the USHA additional delays were unavoidable, owing to the lack of housing-authority machinery, inexperience, and the absence of exact information on housing conditions and requirements in individual localities.

However, the USHA had entered into loan contracts totaling \$638,213,000 with 171 local authorities for the construction of 413 public housing projects containing 145,646 units, at the end of June 1940. Of these projects, 220, comprising 84,126 dwellings, were under construction or had already been completed. In all, 30 projects were actually occupied on that date. Only about \$46,000,000 remained for loans and all of this amount was earmarked. The funds authorized by Congress, prior to the fiscal year beginning July 1, 1940, are expected to provide housing for a total of 160,000 families in 435 projects in 208 communities in 35 States, the District of Columbia, Hawaii, and Puerto Rico.

The extent of the unfilled local demand for Government loans is indicated by a statement of the Administrator of the USHA in April 1940. At that time the amount of applications rejected, owing to lack of funds, aggregated over 1 billion dollars. If sufficient funds had been available to authorize loans, these projects would have furnished accommodations for 225,000 families.

A report, issued early in April 1940, showed that average monthly shelter rents (the rent for accommodations without utility charges) established for 15,878 dwelling units in 41 USHA projects are approximately the same as rents paid for living quarters in slum areas in the same communities. For these 41 projects, in 26 communities, located in 12 States, the average shelter rent is fixed at \$13.93 per unit per month, as compared with a median rental of about \$1.50 per month less for substandard housing in the same communities. In the USHA projects, average monthly rentals range from \$6.59 for a unit in the South to \$16.65 in Yonkers, N. Y. Adding the cost of utilities, the

monthly averages are \$19.51 for all units, \$9.02 in the South and \$24.78 in Yonkers. The average income of families to be housed in the 41 projects is \$824 per year, or \$69 a month; the range is from around \$450 to \$1,110 a year.

In establishing and maintaining these low rentals the Federal subsidy has amounted to \$6 a month for each family, or about one-half of the maximum aid allowable under the United States Housing Act.

Location and name of the 41 projects, number of dwelling units, average shelter rents, and estimated average annual family income for each project are shown in table 2.

TABLE 2.—USHA Housing Projects as of 1939-40

Location and name of project	Number of dwelling units	Average monthly rent per unit		Estimated average annual family income
		Shelter	Shelter plus utilities	
Total, 41 projects	15,878	\$13.93	\$19.51	\$824
Daytona Beach, Fla.: Pine Haven	167	7.36	11.24	470
Jacksonville, Fla.: Brentwood Park	230	10.58	13.37	750
Miami, Fla.: Edison Courts	345	11.90	15.95	750
St. Petersburg, Fla.: Jordan Park	242	8.85	12.87	500
Augusta, Ga.:				
Olmsted Homes	167	10.35	13.95	665
Sunset Homes	168	8.52	11.52	498
Louisville, Ky.: Clarksdale	786	13.00	18.30	750
Detroit, Mich.: Brewster Addition	240	13.83	20.54	887
Elizabeth, N. J.: Mravlag Manor	423	14.74	21.63	868
Newark, N. J.: Pennington Court	236	13.75	21.05	842
North Bergen, N. J.: Meadow View Village	172	13.73	22.75	925
Trenton, N. J.:				
Lincoln Homes	118	11.06	20.49	817
Mayor Donnelly Homes	376	15.47	23.54	927
Buffalo, N. Y.:				
Lakeview	668	13.35	21.01	850
Willert Park	173	12.91	19.88	750
Commodore Perry	772	13.22	20.51	825
New York, N. Y.: Red Hook Houses	2,545	16.64	22.64	1,060
Syracuse, N. Y.: Pioneer Homes	678	13.72	21.61	834
Utica, N. Y.: Adrean Terrace	213	12.13	21.86	800
Yonkers, N. Y.: Mulford	552	16.65	24.78	1,110
Toledo, Ohio: Charles F. Weller Homes	384	14.25	21.79	839
Allentown, Pa.: Hanover Acres	322	13.99	21.77	878
Pittsburgh, Pa.:				
Terrace Village I	3,073	15.61	20.15	778
Bedford Dwellings				
Terrace Village II				
Charleston, S. C.:				
Robert Mills Manor and extension	266	12.26	14.36	765
Anson Borough Homes	290	7.55	9.02	450
Wraggs Borough Homes				
Knoxville, Tenn.:				
Western Heights	244	11.16	12.79	659
College Homes	320	10.01	11.56	631
Memphis, Tenn.:				
Lamar Terrace	478	14.46	17.36	636
Austin, Tex.:				
Chalmers Street	86	8.62	13.03	640
Rosewood	60	6.97	11.28	550
Santa Rita	40	6.59	10.98	545
Charleston, W. Va.:				
Washington Manor	304	10.50	15.51	680
Littlepage Terrace	170	15.00	20.36	1,000
Huntington, W. Va.:				
Washington Square	80	10.16	16.09	640
Northcott Court	136	10.75	16.06	640
Marcum Terrace	284	14.98	19.90	790
Mount Hope, W. Va.: Stadium Terrace	70	11.88	15.00	759

Economies in addition to low rent are accruing to tenants of certain of the PWA low-rent projects as a result of reductions in insurance and utility rates obtained by the Authority. Thus the insurance charge has been decreased on the average from 30 to 12 cents a month on a 4-room unit. Larger savings will result from lowered utility rates. For example, when the adjustments in rates are made, project occupants in New England will have their charge reduced from \$6.69 to \$3.02, in the South Central States from \$3.49 to \$1.18, in the Southeast from \$6.34 to \$2.63, and in the West from \$4.14 to \$2.15. Extension of such contracts may doubtless be expected in the projects constructed by the USHA.

Particular stress is being placed on a further lowering of construction costs as these chiefly determine rents. The average over-all cost (including net construction cost, dwelling equipment, administrative expenses, carrying charges, architect's fees, nondwelling facilities, and land) of a complete family dwelling unit in the first 193 projects financed with USHA loans for low-income families was \$4,456, or about 12 percent less than the \$5,071 average cost of similar units in 240 large-scale rental developments erected by private industry for families in the general population, according to the USHA. Certain loan contracts of the USHA provide for even lower over-all costs, some as low as \$3,200 for a complete dwelling. In Baltimore, Md., a 700-unit project is to cost \$3,149 per dwelling.

The work of demolishing one slum dwelling for each low-cost unit erected is progressing. In mid-March over 33,000 unfit units had already been torn down out of a total of 160,000 that must finally be demolished (if present plans do not change) to compensate for the new units for which loan contracts were approved at that time.

Rural Housing

House construction was initiated for rural workers by the Resettlement Administration in 1935. Projects undertaken were of three types, of which only one, consisting of groups of farms, was rural in the strict sense. The remaining two were planned suburban towns, known as "greenbelt towns"; and subsistence homesteads, where families could supplement their incomes from regular employment by raising garden produce, chickens, and even pigs.

A Federal program of subsistence homesteads had been undertaken even before the Resettlement Administration was established. The early projects were constructed with funds made available from the appropriation under the National Industrial Recovery Act by the Subsistence Homesteads Division of the Department of the Interior and by the Federal Emergency Relief Administration.

The objectives of the Resettlement Administration went beyond furnishing adequate housing at low cost, for, as the name of the

organization suggests, the task was one of resettlement and rehabilitation of farm families. As already mentioned, the program was extended to provide dwellings with subsistence gardens, and three suburban communities were also developed in an endeavor to demonstrate what might be accomplished with good planning.

The Farm Security Administration succeeded the Resettlement Administration in 1937. Although its chief work consists of making loans to farmers and insuring mortgages, this agency took over about 140 housing projects established by the Resettlement Administration and other prior agencies, and has also constructed some farm houses.

At the end of 1939 a total of 164 rural projects, consisting of some 20,000 dwelling units, had been provided under the rural program. This total includes the 3 greenbelt towns and 3 projects transferred to the Farm Security Administration, which were developed by the Federal Emergency Relief Administration and had previously been administered by corporations under the general guidance of the Works Progress Administration. Only 15 projects having 827 units had been sold to individual clients or associations, but, in addition, 2,324 individual farms on projects developed by the Resettlement Administration had been sold to homesteaders. In the spring of 1940 plans were being made for the sale of 12 more projects.

Data regarding construction and repair of dwellings under the Federal rural housing program are shown in table 3, by kind of project and type of dwelling. The farm homes listed include subsistence homesteads as well as farms in rural communities.

TABLE 3.—*Construction and Repair of Dwellings Under Federal Rural Housing Program*

Kind of dwelling	Greenbelt	Number of units		Total
		Farm	Migratory labor	
Total dwellings.....	2, 133	16, 858	353	19, 344
Detached.....	303	12, 211	353	12, 867
Semidetached.....	226	32		258
Multifamily.....	1, 146	72		1, 218
Apartment.....	458			458
Repaired.....		4, 543		4, 543

Other buildings erected as part of this program are as follows: 220 community, administrative, school, and other public buildings; 81 canneries, factories, etc.; 39,402 farm buildings such as barns and poultry houses; and 1,148 shelters, 2,574 tent platforms, and 104 community buildings, hospitals, etc., in migratory labor camps.

The Farm Security Administration and the Resettlement Administration before it, followed, at the start, the procedure of the PWA; that is, the direct building of dwellings. Beginning in 1938, however,

the Farm Security Administration abandoned the construction of dwellings and gave contractors the benefit of its experience in finding means of lowering costs on rural projects.

When the rural program was initiated—that is, under the National Industrial Recovery Act—dwellings of a relatively expensive type were constructed. Brick and stone were used for exterior walls and a bathroom was standard equipment in every dwelling. The need for reducing costs led to a shift to frame construction, smaller and fewer rooms, and omission of bathrooms. In planning the less elaborate dwellings, economies have been worked out whereby costs are cut further by using standard-size products and precut and prefabricated materials. The first 4,000 units built in rural areas averaged \$3,000 each. Later a \$1,500 house was built that proved livable and durable, and the cost of houses of this kind has subsequently been reduced by as much as \$300.

Recent experience shows a progressive reduction in dwelling construction costs. The Farm Security Administration announced on November 17, 1939, that 2,056 tenants, buying farms under the Bankhead-Jones Farm Tenant Act in the preceding 2 years, built houses at an average cost of \$1,313. Average costs per dwelling ranged from \$645 for 16 dwellings in Puerto Rico to \$2,600 for 2 in Iowa. Houses in most cases have 5 rooms, a screened work porch and a front porch, and are wired for electricity. The costs quoted include profit for the contractors and material dealers and payment of prevailing wages to labor.

The success of the rural projects can only be measured in relation to the operation of the farm land supplied each tenant or owner, and it is too early for this. However, the three greenbelt towns, having been established primarily to house city workers, have now been occupied long enough to make it possible to furnish some information regarding the status of tenants.

In all, these greenbelt towns accommodate 2,259 families, of which 2,133 live in apartments or houses and the remaining 126 on adjoining farms. The three towns differ from any others in that they were completely planned. They adjoin cities which were ascertained to have had housing shortages. They are complete in every respect, having parks, recreation areas, community buildings, and shopping centers. As the lay-out is such as to permit future expansion in housing facilities—roads, sewers, etc., were installed in the beginning—the unit cost per building is unusually high at the present stage of development.

Greenbelt, Md., was ready for occupancy in September 1937, Greenhills, Ohio, in April 1938, and Greendale, Wis., in May 1938. Although each has a long waiting list, applications for vacancies are still accepted. Rentals at Greenbelt range from \$18 to \$41 per month,

with an average rental of \$31.23, including heat. Water and electricity are billed separately and are estimated to cost \$3.90 a month per family. Units range from 1 room and bath to 7 rooms, bath, and full basement. At Greenhills the rental range is from \$18 to \$42 for a 4-bedroom single family house, and the average is \$27.62. Greendale rentals start at \$19 and extend to \$33.50 a month for a 4-bedroom house, and the average monthly rental is \$27.95.

Average incomes of families in the three greenbelt towns are \$1,500 to \$1,700. Income, need for better housing, and rent-paying ability are taken into account in selecting tenants.

Each town is self-governed, although the Farm Security Administration owns the land and buildings. Greenhills has a mayor-council type of government, and the other two towns have city managers.

The USHA has also begun to provide modern sanitary homes at low rentals for farm families of low income, including owner-operators, tenants, sharecroppers, and rural wage workers. The Authority has contracted to make loans on projects in six widely scattered localities in Arkansas, Georgia, Illinois, Indiana, Mississippi, and South Carolina. The local county housing authorities will erect 1,300 dwellings at an average net construction cost of \$1,682 per unit and an estimated over-all cost for each complete dwelling of \$2,158.

Indications are that rents will be \$50 a year or less. Savings on rent are expected as occupants will perform the ordinary maintenance and repair work. Each dwelling will have at least one acre of land. Although ownership will remain in the hands of the local authority, each dwelling and plot will be rented to a family engaged in working the adjoining farm. Precautions are to be taken to prevent farm owners from imposing less favorable conditions on farm tenants and sharecroppers by reason of the improved housing which will be made available under this program.

In planning for rural housing for rent and, if necessary legislation should be adopted, also for sale, the USHA pointed out that it would finance 90 percent of the total cost, the remaining 10 percent to be furnished by the localities, of which a number have already organized to cooperate in the program.

Requirements for occupancy would be the same as in USHA-aided urban projects. Only families whose incomes do not exceed 5 times the rental could qualify, except that for families having three or more minor dependents the ratio would be 6 to 1. Income, for this purpose, includes net profit from sales of farm produce, plus the value of products raised on the farm and consumed in the home.

Mortgage Loan Agencies

Another objective of the public housing program is to lower mortgage charges. While the various agencies described have rehoused a

substantial number of the lowest-income families in subsidized dwellings, at the same time improving housing standards of beauty, convenience, and durability, another group of governmental bodies has been developing machinery to promote mortgage credit under liberal terms so that private industry could expand building operations and the middle-income families might buy or rent houses.

The Federal Home Loan Bank Board administers the following agencies operating in the field of home-mortgage finance, the primary objects being to encourage and assist private agencies in making adequate long-term home-mortgage credit available and to provide a sound investment for savings of persons investing small sums.

Under the Board's supervision the Federal Home Loan Bank System, which has 12 regional banks, extends both short- and long-term loans to member home-financing institutions, such as building and loan associations, cooperative banks, savings banks, and insurance companies. The Federal Savings and Loan System is responsible for chartering and supervising privately managed local mutual-thrift and home-financing institutions, known as Federal Savings and Loan Associations, all of which must be members of the Federal Savings and Loan System.

A special agency—the Federal Savings and Loan Insurance Corporation, which is also under the supervision of the Federal Home Loan Bank Board—insures the accounts of individual investors in all Federal Savings and Loan Associations and in approved State-chartered institutions of the savings and loan type against loss up to \$5,000 on each account.

The functions of the Home Owners' Loan Corporation in aiding distressed home owners to refinance their mortgages are described on pages 269–270.

Existing mortgages may be refinanced under the RFC Mortgage Co. and loans may be made for new construction where there is economic need to aid in establishing a normal market for sound mortgages. Mortgages may be purchased at par on properties on which dwellings were erected prior to January 1, 1936, and which are insured under title II of the National Housing Act. Applications for loans made by distressed holders of first-mortgage real-estate bonds and certificates are considered. The RFC Mortgage Co. does not refinance mortgages nor lend when credit is otherwise available from private sources, and in no case does it enter into mortgage arrangements covering residential buildings with less than five apartments.

The Federal National Mortgage Association purchases FHA-insured mortgages on new houses and rental-housing projects. It may finance FHA mortgages on large-scale projects. FHA-insured mortgages on dwellings on which construction was commenced prior to January 1, 1936, are not purchased by this agency.

The operations of the Federal Housing Administration are expanding steadily, and this organization, which insures loans but neither lends money, clears slums, nor builds houses, is coming to be the key factor in new-home financing and construction. Preliminary estimates show that about one-third of the nonfarm dwellings constructed in the United States during 1939 were financed with FHA-insured mortgages.

The FHA was created under the National Housing Act of 1934. The law has subsequently been amended and affords insurance of loans for the repair and modernization of existing dwellings, as well as on mortgages. Terms are liberal on loans for low-cost dwellings (under \$6,000) which are encouraged by reducing the required equity of the purchaser to 10 percent instead of the 20 percent on houses of higher price and lengthening the period of amortization from 20 to 25 years. Effective January 1, 1940, the loan regulations under the FHA were revised to encourage further construction of still lower-cost units. Under this plan the borrower is only required to have an equity of 5 percent in the completed property. The maximum loan is \$2,500 to be amortized in 15 years and 5 months. No second mortgage or other junior financing is permitted and the structures must conform with FHA minimum standards.

At the end of 1939 more than 3 billion dollars' worth of home-financing insurance had been granted by the FHA for 465,000 small houses, 2,330,000 property-improvement jobs, and 265 large projects, with approximately 30,000 dwelling units. One-third of the total amount was insured in 1939. Nearly 12,000,000 persons are estimated to have benefited under the program.

Over 90 percent of the 150,500 dwelling units constructed under the program in 1939 are single-family structures. The average FHA valuation was about \$5,000. The percentage distribution of insured mortgages on 1- to 4-family houses in 1939 is shown in table 4.

TABLE 4.—Percentage Distribution of Insured Mortgages on 1- to 4-Family Houses, 1939

Mortgage principal	Percentage distribution			Mortgage principal	Percentage distribution		
	New houses	Existing houses	Total		New houses	Existing houses	Total
Less than \$2,000.....	0.6	9.2	3.0	\$8,000 to \$9,000.....	1.4	1.7	1.5
\$2,000 to \$3,000.....	9.7	26.5	14.4	\$9,000 to \$10,000.....	.4	.7	.5
\$3,000 to \$4,000.....	26.5	26.1	26.4	\$10,000 to \$12,000.....	.5	1.1	.6
\$4,000 to \$5,000.....	29.3	17.7	26.0	\$12,000 to \$16,000.....	.4	.8	.5
\$5,000 to \$6,000.....	22.0	8.8	18.4	Total.....	100.0	100.0	100.0
\$6,000 to \$7,000.....	6.5	5.2	6.2				
\$7,000 to \$8,000.....	2.7	2.2	2.5				

Slightly over 88 percent of the insured mortgages, on both new and existing houses in 1939, were in amounts of less than \$6,000. However, only 10.3 percent of the mortgages on new houses were for under \$3,000, while on existing houses the percentage was 35.7.

Units improved during the year 1939 under the modernization plan totaled 512,849. These loans averaged \$400 each in the second half of 1939 and, as the FHA stated, "Our experience has shown that property maintenance is almost as important as the construction of new homes."

The FHA and other governmental agencies, in cooperation with the building industry, material dealers, manufacturers, and lending institutions, are encouraging further construction of \$2,500 houses that may be bought by families with incomes ranging from \$1,000 to \$2,500 a year. Building of this kind under the insured-mortgage plan expanded markedly during 1939, when the number of insured mortgages doubled from 5,845 at the beginning to 10,873 at the end of the year.

The average monthly mortgage payment on FHA insured mortgages was \$28.52 in 1939. Under the program for small homes costing \$2,500 or less the monthly payment amounted to \$20.90.

ANNUAL WAGE AND GUARANTEED-EMPLOYMENT PLANS IN UNION AGREEMENTS¹

IN RECENT years there has been great interest in various methods of increasing the job security of the American wage earner. The country has been confronted on the one hand by the problem of extensive total unemployment, and on the other by the fact that a large proportion of the workers employed in most industries and trades are unable to secure full-time employment throughout the year.

On the whole, the solution of these problems is outside the scope of the union agreement. Much more far-reaching in the direction of solving the problems of unemployment and irregular employment have been the various measures of social legislation enacted by Congress in the last few years.

In addition to their broad social purposes two of these recent Federal laws, the Social Security Act of 1935 and the Fair Labor Standards Act of 1938, offer inducements to companies which regularize the employment of their workers. For example, the Social Security Act provides that States may incorporate in their unemployment-compensation laws a provision allowing tax credits to companies which guarantee to all their employees 30 hours of wages for each of 40 calendar weeks, with 1 weekly hour of wages deducted for each additional week guaranteed in the year. The Fair Labor Standards Act grants a partial exemption from the overtime-pay provisions to those companies which sign a union agreement guaranteeing 2,000 hours of wages per year to their employees. Such companies need not pay time and a half for overtime until an employee is required to work more than 12 hours a day or 56 hours a week. To date, only a few such agreements have been approved as fulfilling the requirements of the act. (This annual-wage clause should be distinguished from another clause in the act which allows similar overtime exemptions when there is in effect an agreement with a union providing for a maximum of 1,000 hours of work in any 26 consecutive weeks. This clause, however, does not require a guaranty of any minimum number of hours.)

Only a fraction of 1 percent of the 7,000 union agreements on file with the Bureau of Labor Statistics contain annual-wage or guaranteed-employment provisions. Much more common in union agreements are other methods of mitigating the effects of insufficient work.² The explanation of the infrequency of annual-wage and guaranteed-employment plans in American industry today lies in the

¹ Prepared in the Bureau's Industrial Relations Division.

² See Share-the-Work Provisions in Union Agreements, in *Monthly Labor Review*, June 1940 (p. 1340). Dismissal-wage plans are generally in effect only on the railroads and in the agreements signed by the Newspaper Guild. For the latter, see *Monthly Labor Review*, April 1940 (p. 825).

very problem which such plans are designed to correct. As a rule, the only companies which feel they can guarantee full-time employment or an annual wage a year in advance, are those which have substantially solved the problem of regularizing employment. Even the pecuniary inducements offered by Federal legislation have been insufficient to induce more than a few companies to assume as a fixed charge the cost of providing full-time employment for their workers throughout the year.

Some guaranty plans, after having been adopted, were abandoned when the companies found they were unable to finance them in the face of decreased production. Others were abolished when the unemployment-compensation laws took effect. A number of the guaranteed wage or employment plans now in existence—as for instance, the Procter & Gamble and the Nunn-Bush plans—were instituted as part of a management program and not as the result of collective bargaining. This article is confined to those plans which are provided for through employer-union agreements.

Only 14 of the 7,000 union agreements on file with the Bureau of Labor Statistics incorporate such plans, and these cover not more than an estimated 5,000 employees. Since most of the agreements are signed for a 1-year period, the employment guaranty is assured only for a year. In 13 of these agreements the wage rates were indicated, making it possible to compute the guaranteed annual wages for the various employees covered. In the other three agreements the wage rates are not available and the amount of the guaranteed wage is therefore unknown.

The annual guaranties of income fall into two general classes: (1) Those containing no restrictions, and (2) those which restrict the guaranty by limiting either the number of employees covered or the amount which the employer is to spend in carrying out the guaranty, or by establishing conditions the occurrence of which will relieve the employer from the performance of the guaranty.

Guaranty Plans Without Restrictions

One of the agreements fulfilling the requirements of the 2,000-hour overtime-exemption clause of the Fair Labor Standards Act is that between George A. Hormel & Co., Austin, Minn., and the United Packinghouse Workers, covering about 3,000 employees. The Hormel plan was first established in 1931, and was later brought within the scope of the act by a clause in the agreement guaranteeing 2,000 hours' pay and prohibiting more than 2,000 hours' work during the 52-week period.

The plan is an example of an annual wage applied to a seasonal industry. Livestock arrives for slaughter in two main periods, spring

and fall, and in the past this occasioned the lay-off of men as soon as work slackened. In an attempt to regularize employment the Hormel management worked out a "straight time" plan. Under this arrangement an estimate is made of the business volume for the coming year and the number of workers which experience indicates are necessary to complete the work. The estimated labor cost is then budgeted into 52 weekly installments, based on a 40-hour week. Thus, instead of the lay-off of men at slack season and their rehire during the rush period, the same employees work the year round.

If at the end of a year less has been produced in any department than was budgeted, the employees become indebted to the company for the difference in work and must make up the difference at some future time. Bonuses are paid for all work done in excess of the estimate. The union takes an active part in preparing schedules of production, the jobs and rates for employees, and rules governing transfer of employees from one department to another.

Every employee originally assigned to the straight-time schedule for any year will be employed for the year and will receive for said year not less than an amount equal to the weekly rate of pay provided for him in the latest approval of the straight-time plan for his department for the 52-week period contemplated by this arrangement. Additional compensation may be paid for additional production or additional hours worked according to such arrangements as may be made in behalf of the group or the individuals concerned.

In no case shall any such employee be employed more than 2,000 hours within the applicable 52-week period.

The other three agreements which fulfill the requirements of the Fair Labor Standards Act for companies desiring to operate under the 2,000-hour provision cover a small number of highly skilled craftsmen, no one of whom receives less than \$3,200 per year. The agreements are signed by the Machine Printers Beneficial Association and the Cranston Print Works, Cranston, R. I., the Bellman Brook Bleachery Co., Fairview, N. J., and the Greenville Finishing Co., Smithfield, R. I. One of these provisions is given below:

The company agrees to continue to employ the members of the association now presently in the employ of the company during the period covered by this agreement, and guarantees to pay each journeyman printer for said period an annual wage of not less than \$3,380. The company agrees that each of said members of the association in the employ of the company throughout the period covered by this contract shall, subject to and in accordance with the provisions of this contract, work not more than 2,000 hours during the period of 52 consecutive weeks covered by this contract.

The following provides a guaranty of a minimum weekly wage for the entire year, based on 40 hours per week. The annual guarantees range from \$1,040 for unskilled help to \$2,860 for the most highly skilled workers. This agreement was negotiated with some cleaning and dyeing plants in Detroit, Mich., by the Amalgamated Clothing Workers.

* * * all employees shall be guaranteed an annual wage, such wage to be arrived at by causing a multiple of 40 times the hourly rate set forth herein as the total weekly wage to be paid.

A 2-year agreement between the same union and some cleaning and dyeing plants in Newark, N. J., provides for a minimum annual wage ranging from \$1,040 to \$2,340.

All employees above classified, and those classified in paragraph 1 of this agreement, except pressers, are to work on a weekly basis and are not to be laid off during the life of this agreement. In the event any department or the entire shop does not work on any day, the weekly workers' wage is not to be deducted for that day.

Weekly basis means to work 52 weeks in the year at 40 hours per week—except during peak seasons at 50 hours per week as specified in paragraph 8 of this agreement—and to receive a full week's pay, each week, during the life of this agreement.

One agreement provides "There shall be a guaranteed time of 35 hours of work per week the year round." The workers are assured of a definite minimum income, varying from about \$1,000 a year to nearly \$1,500 for the highest paid occupations. The agreement covers 14 small sausage manufacturers in Minneapolis, Minn., and was signed with the Amalgamated Meat Cutters and Butcher Workmen of North America.

Another, though not guaranteeing a full year's work, provides sufficient employment to be classed among the annual-wage clauses. This agreement, between the United Radio and Electrical Workers and the Cromwell Silver Manufacturing Co., New York City, guarantees full-time employment (40 hours per week) for 45 weeks during the year and part-time work (24 hours per week) for 6 additional weeks. The lowest annual wage to be paid under this provision is about \$775. Since a large proportion of the employees receive rates above the minimum, the annual wage for these workers ranges considerably above the minimum guaranty. To effectuate the guaranty, the company has reserved an unqualified transfer right.

* * * he shall employ the employees in the schedule herewith attached and made part of this contract for a period of 45 full weeks during the year of 1939, and that the remaining 6 weeks, he will employ them on a part-time basis 3 days a week, and that 1 week, namely between Christmas and New Year's, he shall have the right to close the factory for the purpose of taking inventory. * * *

It is further agreed and understood and by virtue of the above guarantee, that the employer has an unqualified right to transfer any employee or employees from any department that they are originally working in, to any other department where there is a greater abundance of work. This, in order to better effect the above guarantee and to be able to shift employees from departments where there is little or no work to departments where there is more work. No employee shall have the right to refuse such transfer.

Limited-Guaranty Plans

The limited plans guarantee employment for only a part of the work force or only so long as a specified cost is not exceeded. In some agreements the guaranty is made contingent upon business conditions or other factors beyond the control of a company. The following provision in an agreement of District 50, United Mine Workers, covers seven of the nine employees of the company, who are guaranteed a minimum of 32 hours' work per week for 48 weeks. The minimum rates of pay for the various classifications vary from 65 to 75 cents per hour. Minimum annual rates range, therefore, from nearly \$1,000 to \$1,152.

The following is a list of employees of the Stewart Paint Manufacturing Co. (Minneapolis, Minn.), classified as to job occupation, in order of their seniority, seven (7) of whom, as identified by asterisks, are to be guaranteed on the basis of the terms and provisions of this agreement, not less than 48 weeks' employment during the life of the above referred to agreement at not less than 32 hours' work per week.

In the following provision the guaranty is restricted to a specified proportion of the total employees. The guaranty is then extended to include additional employees if and when business conditions warrant. Employees covered by the guaranty are assured of wages according to their classifications, ranging from \$845 to \$1,820 per year. The agreement, covering nearly 1,400 employees, is between the Laundrymen's Association of Seattle, Wash., and the Laundry Workers' International Union.

It is agreed that starting June 1, 1937, 60 percent of all inside employees shall be granted 40 hours' work per week, and that when the weekly volume reaches \$44,500 that 70 percent of said employees shall be guaranteed 40 hours per week, and that with each subsequent increase of \$1,500 per week in the weekly laundry volume, a further increase shall be automatically effective of 10 percent in the number of employees to be guaranteed a full 40 hours' employment, until a maximum of 90 percent in such guarantee has been reached.

The following is an example of a guaranty which limits the company's obligation to a specified sum of money. The agreement calls for the setting aside of a limited amount of money to increase pay in weeks when regular earnings fall below a certain minimum. Assuming the fund is not exhausted, men will receive not less than \$780 for the year and women not less than \$624 per year, on the basis of minimum hourly rates of 60 and 45 cents, respectively. The agreement, covering about 200 employees engaged in the dyeing and finishing of silk and rayon fabrics, is between the Textile Workers' Union (C. I. O.) and the Richmond Piece Dye Works, Richmond, Va.

All male employees, who have a service record of 1 year or more shall, as of the first of January, 1940, and during their continuance on the pay roll, receive an annual minimum on a weekly basis of not less than \$15 per week throughout the period of this agreement; and also all female employees who have a service record

of 1 year or more shall, as of the first of January, 1940, and during their continuance on the pay roll, receive an annual minimum on a weekly basis of not less than \$12 per week throughout the period of this agreement; provided, however, that in the application of the annual minimum the cost to the employer shall not exceed \$5,000 a year. This \$5,000 shall be applied during the period when the workers ordinarily earn less than \$15 and \$12 per week respectively. On such occasions, the employer shall add to the workers' actual weekly earnings the difference between the amount earned and the weekly minimum as hereinabove set forth. The above method shall be continued until the entire \$5,000 has been exhausted. Be it further understood that any employees who fail to report for work when notified to do so shall have deducted from their weekly minimum an amount equivalent to the amount earned by the workers in their department. Such deductions shall be applied only during slack periods when application for the annual minimum is made.

The guaranty provision which follows also provides employees with a known weekly sum upon which they may depend for the life of the agreement, with a specific deposit by the company from which the weekly sum may be paid. The guaranty, however, only amounts to the equivalent of three 7-hour days per week. Based on the hourly rates cited, the annual guaranty totals nearly \$1,300. The agreement is between the Upholsterers International Union and the Furniture Specialties Corporation, New York, N. Y.

The employer guarantees at least three days' work or three days' pay for each and every week during the existence of this agreement.

It is agreed that annual employees shall receive \$1.15 per hour, with a guarantee of not less than three days' pay in each and every week.

The employer, by his own request and petition to the union, desires and agrees to deposit the sum of \$3,000 in cash at the time of signing this agreement with the union as a guarantee of trust and good faith of his promise that he will live up to the promises and guarantees made and given to the union through this covenant.

The restriction in the following provision is based upon a percentage of the employee's full-time earnings. The agreement guarantees employment at 40 hours a week for a full year except when business slackens because of unforeseen contingencies, not including failure to secure orders. Since the agreement runs for 2 years, this amounts to a 2-year guaranty of at least 80 percent full-time work. The provision is in the agreement between Federal Labor Union No. 20425 and the Morton Salt Co. and Leslie Salt Co., of Newark, Calif.

In order to promote the economic security of the employees, the employer guarantees each employee who on April 1, 1938, had been for 1 year regularly in the employ of the employer, a minimum compensation (including overtime, if any), during each year of the life of this agreement, equal to 80 percent of the compensation he would have earned had he worked at straight time (or been on vacation or holiday with pay) a total of 260 days of 8 hours each; provided, that in calculating said minimum compensation there shall be deducted from said 260 days, the following: (a) Regular working days during which any given employee may be absent from work voluntarily (except on holidays or vacation) or because of sickness; (b) Regular working days during which the employer fails to provide work for any such employee because of fire, strikes, floods, failure

of transportation facilities, inability to obtain supplies or raw materials, or other similar cause beyond the control of the employer (not including mere failure to secure orders); (c) In the case of an employee who quits or is discharged for cause prior to the end of such year, the regular working days and holidays intervening between the date of quitting or discharge and the end of such year.

The following provision guarantees 48 weeks of work at 46 hours per week. The agreement continues for a period of 5 years. After the first year lay-offs may take place in proportion to a decrease in business, but the 48-week guaranty continues for those remaining. Guaranteed wages under this agreement range from \$1,287.36 to \$1,518.24 per year. The agreement is between the International Brotherhood of Teamsters and the United Parcel Service of Milwaukee, Wis.

The employer agrees to provide all of the present regular employees who are members of the union, a list of which employees is hereto attached and made a part of this agreement, with 46 weeks' work plus 2 weeks' vacation in each year for the life of this agreement, except as hereinafter provided in the paragraph numbered 16. It being the intent and practice of the employer to provide all regular employees with full-time work. * * *

This agreement shall be in full force and effect for a period of 5 years from the date hereof: *Provided, however,* That during the last four years of this agreement if the volume of deliveries decreases in excess of 10 percent, the employer shall have the right to lay off regular men, a list of which is attached and made part of this agreement, in proportion to the percentage of decrease in volume in excess of 10 percent. It being the understanding and intent of the parties hereto that if the volume of business decreases 10 percent or less, the employer may reduce the extra force to whatever extent it deems necessary.

Collective Bargaining

UNION AGREEMENTS IN AIRCRAFT MANUFACTURE ¹

IN AIRCRAFT and parts manufacture there are 12 current agreements in the files of the Bureau of Labor Statistics, all of which cover all production workers, both skilled and unskilled. In addition to these, a number of other agreements are in effect throughout the industry. Among the 12 described below are those negotiated by locals of the International Association of Machinists (A. F. of L.) with the Boeing Aircraft Co., Seattle, Wash.; the Curtiss-Wright Corporation, St. Louis Airplane Division, Robertson, Mo.; the Consolidated Aircraft Corporation, San Diego, Calif.; the Beech Aircraft Corporation, Wichita, Kans.; and the Lockheed Aircraft Corporation and Vega Airplane Co., Inc., of Burbank, Calif. Agreements with the Bendix Products Division of the Bendix Aviation Corporation, South Bend, Ind., and the Zenith Carburetor Division of the Bendix Aviation Corporation, Detroit, Mich., are among those negotiated by locals of the United Automobile Workers of America (C. I. O.).

Duration and Renewal

Only one of the agreements runs for an initial period of more than 1 year; that is the Boeing agreement, signed for a period of approximately 20 months. Three of the agreements, including the Curtiss-Wright, provide for automatic renewal from year to year, unless 30 days' notice prior to any expiration date is given. Instead of providing for an extension of 1 year's duration, the other nine provide that they shall continue indefinitely after the original expiration date, until 30 days' notice (60 days in the case of Bendix Products and 15 for Consolidated) is given of a desire to amend or terminate. Among the agreements requiring 30 days' notice are those with Boeing, Lockheed, Vega, Bendix Products, and Zenith Carburetor. The Bendix Products, Vega, Beech, and Lockheed agreements specifically permit changes during the life of the agreement with mutual consent.

The Boeing, Lockheed, Vega, Zenith Carburetor, and two other agreements require that after notice is given, conferences must be held with the aim of negotiating a new agreement. Two of these, including

¹ Prepared in the Bureau's Industrial Relations Division.

Zenith Carburetor, require that the conferences shall begin within 10 days of notice and continue until an agreement is reached.

In the Lockheed and Vega agreements it is stated that the agreement is not assignable, but that in the event of change in management or sale, the present management shall do everything in its power to insure the continuation of the agreement during its prescribed period. A third agreement provides that it is not voided by merger, consolidation, transfer of ownership, etc.

Union Status and Hiring

In all the agreements the union is recognized as the sole collective-bargaining agency for all workers within the jurisdiction of the union. One of these, the Curtiss-Wright agreement, recognizes the union as the sole collective-bargaining agency only as long as it "shall have the right under the laws of the United States and of the State of Missouri." Only two of these agreements (one of which is Boeing) provide for the closed-union shop. There is no general check-off in any of these agreements, but three permit individual employees to authorize deductions from their pay for union dues, in which case the company turns over to the union the total amount deducted.

Most of the agreements include clauses forbidding company coercion and discrimination on account of union membership or activity. In the Bendix Products and one other agreement shop stewards and union committeemen are given special protection against lay-off by a provision placing them at the top of the seniority lists. The Zenith Carburetor agreement prohibits the lay-off of a committeeman as long as a "substantial number" of his constituents are working. Three agreements also specify that coercion and discrimination by the union is prohibited. Nine agreements prohibit union activity on company time, while five specifically prohibit union activity on company property as well.

Under the Bendix Products, Zenith Carburetor, and one other agreement, workers elected or appointed to a union office are specifically given the privilege of a leave of absence without loss of seniority. Under the Bendix Products agreement the leave is for the duration of the office and under the Zenith Carburetor agreement for 1 year. Officers and special representatives of the union, according to the Boeing agreement, may "occasionally" be given time off for union business, if the written approval of the management is obtained.

In three agreements, including Vega and Lockheed, the union representative is accorded the right to enter the plant and, with the permission of the employer, to confer with the workers. The union representative is required to conduct his business promptly and must attempt to avoid interference with production.

In Beech, Consolidated, and one other agreement the union is specifically given the right to use company bulletin boards. In Consolidated the notices are subject to management's approval.

In none of the agreements is the employer limited in his selection of new employees. The two closed-shop agreements merely require that all new employees must become union members. The time within which a new worker must join the union is not specified. In the Beech agreement the company agrees to furnish the union, on request, a monthly list of new employees and employees who have left the company.

The Zenith Carburetor agreement requires the company, in case of an employee's death, to give preference in employment to the person who is the next main support of the family.

The Beech Corporation hires only American citizens and the company rules require that all employees prove citizenship by submitting their birth certificates or citizenship papers. Every employee is also fingerprinted by the company. Violations of these and other company rules by the employees are recognized in the agreement as just cause for discharge or discipline. The practices of the other companies in these respects are not known.

Wages

The agreements generally contain little information concerning the actual wages paid, although nine of the agreements set minimum-wage rates. Some of the agreements list minimum rates for each occupation; others specify merely a single minimum for the plant as a whole. There is a considerable variation in the rates paid by these companies. For example, minimums on the lowest paid occupations (excluding apprentices) range from 47½ to 75 cents an hour. Two of the agreements, having the 75-cent minimum for men, provide a separate minimum for women, and in both of these the hourly rate is 62 cents.

Four agreements provide for wage-rate adjustments during the term of the agreement. In one, the company agrees to review wages at "periodical intervals." The Zenith Carburetor agreement permits the question of wages to be reopened by mutual consent. In Beech the wage adjustment is to follow any Government action which causes the hours to be "substantially less" than at present. The Consolidated agreement provides for the review of all rates every 4 months by a joint committee composed of three employee representatives and three representing the company. If the committee does not agree on revising the rates, the matter may be presented to the management at the next general meeting.

In one plant where piece rates are paid, the workers are guaranteed their regular hourly rates. The timing of operations and the setting

of piece rates are to be made on a basis "consistent with * * * the reasonable working capacities of normal operators." An operation may be retimed if there is a change in design, methods, improvements in manufacture, clerical error, or by "reasonable" request of the workers affected. Any change in rates is effective as of the date the change was determined. No piece rates may be reduced unless the condition or method of manufacture changes to such an extent as to lower appreciably the time necessary for the operation.

In the Bendix Products agreement the company agrees within a limited time to change from a group bonus system of wage payment to hourly rates based on a measured day rate. According to the Lockheed and Vega agreements, any changes in method of payment must be mutually approved.

Seven agreements require the payment of shift differentials. The Bendix Products agreement requires that 5-cent-per-hour differentials be paid for the second and third shifts, while the Zenith Carburetor agreement requires 5-cent differentials for all shifts starting after 12 o'clock, noon. The Boeing and Curtiss-Wright agreements require, for the third shift, that 8 hours' pay be paid for $6\frac{3}{4}$ hours' work. The Beech agreement establishes a $2\frac{1}{2}$ -cent differential for the third shift, while Consolidated has a 5-cent differential for night work. The Consolidated agreement also gives a 5-cent hourly bonus to employees whose regular working time includes both Saturday and Sunday. The seventh agreement requires the payment of a differential of 5 cents for the second shift and of 10 cents for the third. It also establishes a 5-cent an hour differential for staggered shifts.

Under six of the agreements a worker called to work, but not given work to do, is paid a minimum sum ranging from 2 to 4 hours' pay. In the Bendix Products agreement the minimum is 2 hours, while it is 4 hours in the Boeing, Beech, and Curtiss-Wright agreements. The Consolidated and Beech agreements guarantee 2 hours' and 2 hours' and 40 minutes' pay, respectively, for workers called back after leaving the plant for the day. The Bendix Products and another agreement specifically require that waiting time be paid for at the regular rate. Two agreements require that if a worker is temporarily transferred from his own job to another, he must be paid according to the higher of the two rates.

In four agreements (Boeing, Lockheed, Vega, and Bendix Products) the workers must be paid weekly. These four and the Beech agreement contain lists of those purposes for which pay-roll deductions may be made—such as unreturned tools and equipment (at cost), unreturned tool checks, badges, etc., garnishments, purchases made through the company, pay-roll taxes, and group insurance.

Hours and Overtime

All the agreements, except one negotiated with a small manufacturer of aircraft engines, provide for an 8-hour day and a 40-hour week for production employees. The twelfth agreement has a 44-hour week, except as modified by the Fair Labor Standards Act. Four agreements, among them Consolidated, Vega, and Lockheed, require that the 8 hours be consecutive, with an hour or half hour off for lunch. Firemen, watchmen, etc., and those engaged in continuous operations, in most cases may work slightly longer hours. The Bendix Products agreement authorizes two 10-minute rest periods a day for women.

Without exception the agreements require that any work in excess of the regular hours be paid for at the rate of time and one-half. Double time is required after 3 hours of overtime work in a day under the Beech and Consolidated agreements. Under six agreements, including Vega, Lockheed, Curtiss-Wright, Bendix Products, and Zenith Carburetor, any work on Saturday or Sunday, except by firemen, watchmen, etc., is paid for at the overtime rate. In Beech and Consolidated, work may be scheduled at regular pay on Saturday or Sunday, but overtime on Saturdays is paid for at double the regular rate in Beech after 7 hours and in Consolidated after 8 hours. All work on the seventh consecutive day must be paid for at the double rate in the Consolidated agreement.

The Zenith Carburetor and Beech agreements provide that no worker may be compelled to take time off for overtime. The latter agreement also provides that overtime be divided equally among the employees as far as possible. The Boeing agreement permits certain salaried employees to work a "reasonable" amount of overtime without receiving extra payment.

Holidays, Vacations, and Leave

Holidays with pay are not granted in any of the agreements except Beech, which grants 3 holidays with pay and 3 without. All provide that on certain holidays any work performed by the production workers shall be paid for at time and a half or double time. Time and one-half is provided for holidays in five of the agreements, among them Lockheed, Vega, and Bendix Products. Double time is required in six, including Boeing, Consolidated, Curtiss-Wright, and Zenith Carburetor. The Beech agreement provides double pay for work on the paid holidays, time and one-half on the others up to 7 hours, after which the double rate applies. The Lockheed, Vega, Beech, and Zenith Carburetor agreements, with three others, specify six holidays, and four, including Curtiss-Wright, Consolidated, and Bendix Products, have seven holidays listed. The Boeing agreement has eight.

Under six of the agreements all the workers receive vacations with pay; in another (Boeing) only production checkers, factory

clerks, storeroom and shipping employees are given vacations. Details on vacation arrangements are not given in two of these agreements. The five which have detailed vacation plans (Bendix Products, Zenith Carburetor, Lockheed, Consolidated, and Vega) provide that after 1 year of service a worker shall receive a paid vacation of 1 week. In the Consolidated agreement the company has the option of giving the vacation pay in lieu of the actual vacation. The amount of vacation pay, in the Bendix Products agreement, is 2 percent of the earnings in the previous calendar year and in Consolidated it is 40 hours' pay. The Zenith Carburetor agreement allows 40 hours' pay for a worker who has worked 1,580 hours or more; for those who work less, the vacation pay is $2\frac{1}{2}$ percent of the earnings during the previous year.

Under the Lockheed and Vega agreements a worker with 1 year of continuous service preceding May 1 of any year, receives 1 week's vacation with his regular pay and, if he desires, an additional week without pay. In these and the Consolidated agreement a worker is disqualified for vacation privileges if he is absent more than 10 regular working days during the year, unless the absences are due to physical disability, serious illness or death in the immediate family, compulsory jury service, military or naval duty, or authorized vacation leave.

Eight of the agreements provide that leave of absence without pay may be granted. The length of the leave is not limited except in two agreements, which restrict a leave of absence to not more than a year in one case and 30 days in another. Some agreements merely provide that a leave of absence may be granted for "good cause." In addition to leave for employees chosen for full-time union office, other reasons for which a leave of absence may be granted are election or appointment to public office (Bendix Products), compulsory jury duty (Lockheed and Vega), and resignation to attend school with the intention of returning to the employ of the company (Boeing).

Seniority

Eleven of the twelve agreements contain seniority provisions. Six of them provide for seniority on a departmental basis, while three establish plant-wide seniority and one, seniority within job classifications. The Bendix Products agreement requires that separate seniority lists be set up for men and women. This agreement and also the Beech and Zenith Carburetor agreements require that seniority lists be kept up to date and available for inspection.

Employees do not have seniority rights until they have completed their learning period or, in the Boeing agreement, until after a year of cumulative service. Three agreements, including the Curtiss-Wright, provide that seniority, once acquired, is calculated from the date of employment.

Under the Bendix Products agreement an injured worker is placed at the top of the seniority list for 30 days, after which his case is jointly reviewed to determine whether such seniority should be further extended. The injury must be compensable and arise in the course of employment.

Nine of the agreements list the conditions for losing seniority rights. An employee who quits or is discharged for cause invariably loses his seniority. Under Zenith Carburetor and one other agreement a man laid off for 12 consecutive months loses seniority, while a third extends the period to 18 months. The Zenith Carburetor agreement, the Bendix Products agreement, and two others provide that seniority is lost if a worker is absent from 3 to 5 days without notifying the company and without a reasonable excuse. Under the Zenith Carburetor agreement, seniority is lost if a worker does not return within 3 days when recalled, and under the Beech agreement, within 15 days, except in case of sickness or "other valid reasons." Another agreement has a similar provision but without a time limit.

Five of the agreements also provide that seniority is lost unless a worker reports to the company during periods of lay-off. According to the Bendix Products agreement a laid-off worker must report four times a year. Under the Curtiss-Wright, Vega, and Lockheed agreements, laid-off workers must report every 2 weeks or lose seniority. Another agreement requires a worker to report within 20 days after 11 consecutive months' lay-off.

Seniority is retained during authorized leaves of absence. Absences from sickness or disability are specifically named in four agreements, including Lockheed, as not affecting the retention of accrued seniority. The only specified instance of seniority continuing to accrue during leave is for employees of Bendix Products holding a full-time union office.

Five of the agreements, including Lockheed, Vega, Bendix Products, and Zenith Carburetor, have so-called "war" provisions, which permit a worker to retain his seniority if he is conscripted during wartime. One of these agreements makes the same provision for those conscripted into Government civilian service during a war. Two of these also provide for retention of seniority for those who volunteer to serve in the military or naval services during a war.

Transfer and Promotion

Only five of the agreements have any provisions regarding transfers; the absence of such provisions in the other agreements probably indicates that existing practices were acceptable to the union when the agreement was negotiated.

There is a great deal of variation in the manner in which transfers are handled. Under an agreement negotiated with a manufacturer

of aircraft and other engines, a worker transferred at his request to another plant holds seniority only in the plant to which transferred. If he is transferred by action of the company his seniority will continue in the plant from which he was transferred, unless he desires to hold seniority in the plant to which he is transferred and so notifies the company within 60 days from the date of the transfer. No worker may be transferred from one plant to another except with his consent and with notice to the shop committee. Further, this agreement provides that if there should be any difference of opinion over a worker's ability to perform a new job, a fair trial shall be given.

Under the Zenith Carburetor agreement a worker transferred by the company from one department to another retains his accrued seniority. Under the Bendix Products agreement, a worker transferred or rehired in a division other than his own holds seniority in his original division for 3 months. If he is not returned to his original division within this time, all accumulated seniority is transferred to the new division. Divisional transfers may be made only at the request or with the consent of the worker. No worker may be transferred to another division when there are workers with greater seniority on the hiring list who can qualify for the job. A worker laid off from the division to which he has been transferred may return to his old division in accordance with seniority, unless he has established permanent seniority in the new division.

According to the Lockheed and Vega agreements any worker who desires to transfer may apply, and his application will receive consideration before new workers are hired.

Removal of a job or of the plant to another location frequently brings serious problems to the workers involved. Under the Bendix Products agreement, if any job or operation is moved from a plant, or if the plant is moved, the workers affected have preferential employment rights at the new location. If a job or operation is moved from one division to another, the workers on such job have the privilege of transferring with the job. Under another agreement, when operations or departments are moved from one plant to another owned, rented, or leased by the company, the workers affected are also moved, if they desire, and carry their seniority to the new location.

Under the Zenith Carburetor agreement, if operations or departments should be discontinued, the workers affected, so far as reasonably practicable, will be given other work without loss of seniority.

Only the Bendix Products, Zenith Carburetor, and Beech agreements have any provisions regarding promotion. In Bendix Products, a worker assigned to a higher-rate job shall be paid the higher rate after one pay period on the job. According to Zenith, a worker promoted to a higher classification does not receive the increased pay until he has "qualified for the higher rate." The Beech agreement

requires that all vacancies and new positions be posted for 5 days. Employees who are interested may then bid for the jobs and are given 30 days on the job, in order of seniority, to prove their qualifications. If an employee fails during the trial period, it is guaranteed that he will get back his former job.

In two agreements special rules for demoted foremen are made. In one, a foreman may be returned to a production job and hold seniority from the first day of his employment. In the other, any new employee hired as a foreman does not hold seniority over workers in any other department if he is permanently demoted to the rank of workman.

Lay-Off and Reemployment

All agreements, except one negotiated with a small-parts manufacturer, provide for some consideration of seniority in lay-off and reemployment.

Two agreements establish seniority as the sole factor determining lay-offs. In one of these the lay-off is according to seniority within each classification. In the other (Bendix Products), lay-offs of more than 5 working days must be made according to departmental seniority. However, a worker with 3 years' seniority or more will be given an opportunity to take a job in another department if he is qualified. Qualifications for the job must be determined within 3 working days and the transfer is to be effected within 30 days. If the lay-off is for less than 5 days, seniority within the various subdivisions of the department is to govern.

Virtual recognition of seniority as the determining factor in lay-off and reemployment is contained in the Beech and one other agreement, which merely require that the senior employee be competent. The latter further requires that, if the company considers exceptions to seniority necessary, such can be made only after discussion with the union. In the Boeing, Curtiss-Wright, Lockheed, and Vega agreements, seniority does not apply unless skill and competency are equal. These agreements establish a system of efficiency ratings for all employees. In Consolidated, seniority applies only when "ability, production, and conduct" are equal.

Two agreements have provisions for sharing the work when business is slack. Under these agreements, the hours per week are to be reduced to 32 before lay-offs can occur, but one of these (Zenith Carburetor) limits the work-sharing to employees with more than a year's service. In this agreement lay-offs are made according to departmental seniority, although senior workers able to do the work in another department may be transferred upon their own or the shop steward's application. The other agreement provides for lay-offs according to plant seniority, if further reduction is necessary after the workweek has been reduced to 32 hours.

The Boeing Aircraft Co. has assured its workers, in a letter supplemental to the agreement, that no one would be reemployed at a rate lower than his former pay except by agreement with the union.

Three agreements, among them Zenith Carburetor, require 24 hours' notice of lay-off and Beech, 48 hours. In the Boeing agreement, notice must be given 2 hours before quitting time. Three agreements require that the names of those to be laid off be furnished the union. The Lockheed and another agreement provide that on request a written account of any lay-off will be given.

Discharge

Most of the agreements have special provisions which deal with discharge cases. The Bendix Products agreement provides that a worker claiming unfair discharge may give his complaint in writing to his steward. If a hearing is desired, a member of the union committee shall file a complaint within 24 hours after the discharge, and a hearing which the discharged worker may attend will be held 24 hours thereafter. This agreement and one other specifically require reinstatement with back pay for a worker found to be unjustly discharged.

Two agreements provide that the worker must appeal his discharge within 3 days, while another establishes appeals within 36 hours and requires that the case shall be disposed of within 6 days. Six other agreements, including Boeing, Vega, Beech, and Lockheed, require that the reason for a discharge for cause shall be given to the union on its request. Under the Consolidated agreement the reasons will be furnished the union only if the discharged employee so requests. This procedure affords the worker a basis for appeal if he feels that he has been dealt with unfairly.

Six of the agreements, among them Lockheed, Vega, Beech, Consolidated, and Bendix Products, list some reasons justifying discharge. Violation of the agreement is listed in all six. Other reasons are unreported absences for specified times, and violation of mutually agreed upon company rules. The Beech agreement prohibits lay-off of regular employees until after investigation by the union, except in cases of insubordination, intoxication, or "breach of trust."

Learners and Apprentices

Eleven of the agreements have some provision regarding learners. The learning period in most of the agreements is from 30 days (Zenith Carburetor and another) to 90 days (Curtiss-Wright, Boeing, Bendix Products, and one other). In Beech the period is 6 months. The hiring rates for learners range from 5 cents to 10 cents under the regular minimum rates.

Provisions regarding apprentices are included in the Boeing, Lockheed, Beech, and Zenith Carburetor agreements. The last provides only that apprentices shall be under the supervision of the superintendent. The provision in the Lockheed agreement is merely a reference to a separate apprentice agreement approved by the Federal Committee on Apprenticeship.

Under the Boeing agreement an apprentice is hired at the rate of 40 cents per hour and serves an apprenticeship of 4 years. Semi-annually the apprentice is given raises of 5 cents per hour, with a raise of 10 cents after the expiration of the seventh 6-month period. After serving 4 years an apprentice is considered a journeyman and receives the journeyman's starting rate of 90 cents for 6 months and then the regular journeyman's rate if retained. This agreement provides that the company may hire untrained workers according to any regulations issued by the Secretary of Labor under authority of the Walsh-Healey Act.

Apprentices in Beech also start at 40 cents an hour and serve about 4 years (8,000 hours). A raise of 5 cents an hour is given every 1,000 hours, until the journeyman's rate is reached. The ratio of apprentices to journeymen is to be maintained at one to five. Details are to be worked out by the union committee and the company.

Settlement of Disputes

Every one of the 12 agreements contains some provision for the settlement of disputes and grievances that may arise during the life of the agreement. Grievances in the first instance usually are handled by a steward and the immediate superior of the aggrieved worker, and then are carried step by step to higher officials of the company. Under only two agreements must the worker first go to his foreman and attempt an adjustment before referring the matter to his steward. Only one agreement requires that a grievance case must be reduced to writing before initial presentation to the company, although the Vega and Lockheed agreements require that an aggrieved worker must present his case in writing to the union representative. In Consolidated a grievance must be presented in writing if it is appealed beyond the personnel manager of the company. The Lockheed and Vega agreements also provide that a grievance may be appealed to the next higher official if not acted on within 5 days.

Each agreement provides for the establishment of a union committee for the plant as a whole, to handle grievances in the final stages of negotiations and to make terms on matters of unusual importance. Six agreements establish committees ranging in size from 3 to 15 members; the other agreements do not specify the size of the committees. The Lockheed agreement provides that the union committee

shall consist of five members and the president and business representative of the local union; the Vega agreement, three members and the two union officers. Under the terms of the Bendix Products and the Zenith Carburetor agreements, the union committee is entitled to a secretary in addition to the other members.

Only two of the agreements require that members of the committee must be employees of the company, while three, including Bendix Products and Zenith Carburetor, specifically grant the local union the right to call in representatives of the international union, if necessary to the adjustment of a dispute.

In order to facilitate the settlement of disputes, seven agreements, among them Lockheed, Consolidated, Vega, Bendix Products, and Zenith Carburetor, provide for regular meetings between the union committee and management. In some of the agreements, the meetings are to be held monthly, and in others at times mutually agreed upon. Special meetings usually are held on request of either party.

Two of the agreements require that a favorable decision affecting the pay of a worker shall be retroactive. In the Bendix Products agreement the decision is retroactive to the date the injustice occurred, while under the Zenith Carburetor agreement the decision is retroactive to the date the matter was reported.

According to all the agreements except the Curtiss-Wright agreement, the final step in the adjustment process is a meeting between the union committee and representatives of management. If the parties deadlock at this stage, there is no further recourse or means of settlement except by strike or lock-out. In the Curtiss-Wright agreement, any grievance not adjusted within 30 days from the date of the first meeting of the union committee with the company is referred to impartial arbitration. The arbitrator is selected at the time by both parties. If the parties should fail to agree on the selection, one is appointed by the presiding judge of the Circuit Court of St. Louis County. The award is binding on both parties and the cost is borne equally.

Resort to lock-outs or strikes is limited in some fashion in all the agreements except Consolidated which has no provision on the subject. The Boeing, Beech, and Curtiss-Wright agreements prohibit both during the life of the agreements. Other agreements, including Zenith Carburetor, require that the procedure for the settlement of disputes be exhausted before a lock-out or strike occurs. According to the terms of one agreement, the grievance procedure must be exhausted before a lock-out or strike may occur and the procedure is not considered exhausted until negotiations have continued for 15 days at the final stage. This agreement also specifically requires that a strike be sanctioned by the international union.

In the Lockheed and Vega agreements and one other, the union agrees not to take a strike vote and the company not to institute a lock-out until the procedures for the settlement of disputes established by the agreement and by law have been exhausted. If a strike or a lock-out is decided upon, the other party must be notified in writing and action cannot be instituted for 30 days after notification. The company, however, reserves the right to close the plant when it considers such a step necessary to protect the employees or property from violence. These agreements include a statement that "the union is opposed to strikes." Sympathetic strikes, sit-downs, and slow-downs are prohibited. In the event of a strike, the members of the union must withdraw peaceably from the company's property.

Wartime Labor Policies

CANADIAN WARTIME LABOR POLICY¹

VARIOUS recommendations concerning Canada's war-labor policy were embodied in an order in council approved June 19, 1940, the provisions of which are summarized below.

Every effort should be put forth to speed production by war industries.

Fair and reasonable wage standards and labor conditions should be recognized, and where temporary adjustments in pay are made as a result of war conditions, such adjustments might well take the form of bonuses.

Hours should not be unduly increased, but where greater output is desired "it should be secured as far as practicable by the adoption of additional shifts throughout the week; experience during the last war having shown that an undue lengthening of working hours results in excessive fatigue and in a diminution of output."

Safeguards and regulations established to protect the safety and health of the workers should be maintained, and every precaution should be taken to insure healthful working conditions.

No interruptions on account of strikes or lock-outs should occur in productive or distributive operations. Where any controversy comes up which cannot be adjusted by negotiation between the parties, resort should be had to government conciliation agencies. If settlement cannot be effected in this way, the differences should be dealt with under the provisions of the Industrial Disputes Investigation Act, which under the War Measures Act is now applicable to all war work.

Employees should be entitled to organize in trade-unions not controlled by employers. Under the existing criminal code it is "an offense subject to prescribed penalties for any employer or his agent wrongfully and without lawful authority to refuse to employ or to dismiss from employment any person because of his membership in a lawful trade-union, to use intimidation to prevent a workman from belonging to a trade-union, or to conspire with other employers to do either of such acts."

¹The Canada Gazette, Ottawa, June 20, 1940. (2d Extra), p. 2; and The Labor News, Hamilton, Ontario, June 28, 1940.

Employees, through the officers of their trade-union or through other representatives chosen by them, should be free to negotiate with employers or the representatives of employers' associations concerning rates of pay, hours of labor, and other working conditions with a view to the conclusion of a collective agreement.

Every collective agreement should provide machinery for the settlement of disputes arising out of the agreement, and for its renewal or revision, and both parties should scrupulously observe the terms and conditions of any agreement into which they have entered.

In exercising their right of organization employees should not have recourse to either coercion or intimidation for the purpose of influencing any person to become a member of their organization.

When labor conditions established by law, agreement, or usage must be suspended because of the necessity of speeding up wartime production, such suspension should be arranged by mutual agreement and should be understood as applicable only for the emergency period.

The preceding declarations are subject to the provisions of any enactment by the Dominion Parliament or made under its authority with the objective of meeting any particular emergency endangering the national safety of Canada.

In connection with supplying their labor demands, the attention of employers should be drawn to the existing facilities of the local offices of the Canadian Employment Service in the various Provinces, where thousands of semiskilled and skilled applicants have already been registered, and such service should be utilized to the greatest possible extent.

Numerous employers in meeting their labor requirements have had recourse to trade-unions. In the opinion of the Minister of Labor, the more general adoption of this practice would aid in avoiding unnecessary labor shortages.



CANADIAN NATIONAL LABOR SUPPLY COUNCIL

THE establishment of a National Labor Supply Council for Canada (Order-in-Council No. 2686) has been announced by the Prime Minister of the Dominion.¹ The standard international labor organizations are represented on this new body, which is to have an important role in the nation's war activities. The Council will be chiefly concerned with having the right men for every project that the preparedness program demands.

The members of the organization include 5 representatives of employers and 5 representatives of labor. The impartial chairman is Arthur J. Hills, chief of personnel of the Canadian National Railways. Humphrey Mitchell, former Labor member of Parliament for Hamilton East, will serve as secretary.

¹ The Canada Gazette, Ottawa, June 20, 1940 (2d Extra); and Labor (a national weekly newspaper), Washington, D. C., July 9, 1940.

WARTIME PRODUCTION AND LABOR REGULATIONS
IN ITALY*Increased Overtime and Family Allowances*¹

BESIDES the normal production to satisfy domestic requirements and to provide the usual volume in the export trade, Italian factories, following the outbreak of the war, were deluged with orders of all kinds from the warring countries, both for war supplies and for normal peacetime goods which these countries were unable to produce under existing conditions.

Under this increased volume of business, Italian factories were pushed to capacity both in machine operation and in the employment of skilled labor. The problem of factory managers was to produce at the utmost capacity without raising costs above certain economic limits. Formerly it was illegal to require men in factories to work more than 40 hours a week, or on night shifts, except that under certain conditions special permits were given by the authorities for a 48-hour week, resulting in an increase in wages ranging from 10 to 50 percent, according to the industry, for overtime. Skilled labor, however, was limited and machinery could be operated only by a given number of men, and therefore, only by the employment of regular hands for a reasonable amount of overtime, rather than by the hiring of a large number of inexperienced men, could greater productive efficiency be obtained. For this reason overtime in these enterprises is now permitted, the maximum hours allowed being increased from 40 to 57 per week. Wages are increased by 10 percent for overtime between 40 and 48 hours per week, and by 15 percent between 48 and 57 hours per week.

In addition, family allowances (*assegni familiari*) have been increased and extended to include dependent parents and wives of workers, and the employers will pay the 1 percent contribution heretofore assessed against the workers' wages. Employers will, therefore, be assessed the full 4 percent of their workers' wages for sick and accident compensation, family allowances, etc. About 2,000,000 workmen, it is claimed, will be thus benefited.

*Price Fixing*²

The Central Corporative Committee on March 9, 1940, approved the following maximum prices established by the Interministerial Price Committee, which are not to be exceeded up to July 31, 1940.

¹ From report of Bovio Pallucca, clerk in American Consulate General at Milan, Italy.

² From reports of William Phillips, American Ambassador to Rome, and Lester L. Schnare, American consul at Milan.

1. Price increases authorized: Beef cattle on hoof at production market, prime quality, with a yield of 52 percent, increased from 4.10 to 5 lire per kilogram;³ hogs, live weight, increased from 6.30 to 7.30 lire per kilogram, with 0.20 lira additional for select breeds; milk for industrial uses, increased from 84 to 104 lire per 100 kilograms; firewood and charcoal, increased by 4 and 5 lire per 100 kilograms, respectively; specified domestic lump coal 222–243 lire, and coal dust, 195–216 lire per ton; coke, increased 110 lire per ton; local transportation (except in Rome) whether operated by private or municipal companies, an average increase of 15 percent.

2. Prices to be increased in proportion to other authorized increases: Beef other than prime, proportioned to increase in price of prime quality beef on hoof; bacon, grease, fatbacks, lard, and salt pork, in proportion to the price increase of live hogs; milk for domestic consumption, butter, and cheese, proportioned to the increase authorized in price of milk for industrial uses.

3. Prices to remain unchanged at the levels heretofore officially fixed: Bread, pasta (macaroni and spaghetti), rice, olive oil, sugar, coffee, mineral oils (gasoline, naphtha, lubricating oils), soap (standard type), imported coal, lignite; railway, postal, telegraph, and telephone rates; rents, water, and electricity; goods controlled by the State monopolies.

Wage Increases

The resolution of the Central Corporative Committee also declares that the fixing of prices permits an adjustment of remunerations, wages, and salaries, to be reached through direct negotiations between the interested federations of workers and of employers, ranging from a minimum of 10 percent to a maximum of 15 percent. Such increases were to become effective on March 25, 1940.

An agreement reached on March 11, 1940, between the Fascist Confederations of Merchants and Commercial Workers, stipulated pay increases of 10, 12, and 15 percent in specified occupations. Where firms are engaged in activities included in two or more of the pay-increase percentage groups, the increase provided will be applied by departments in the firms or will be determined by the principal activities of the firms. Allowances for rent and living expenses are also subject to the increases provided. Per diem allowances, however, will be increased only for traveling salesmen and only by two-fifths of the increases provided.

These increases apply to all collective labor agreements in effect on March 9, 1940, even if such agreements had been arranged but not yet published by that date.

From March 16 to 23, 1940, Fascist federations of industrialists and of industrial workers concluded 215 wage agreements for 20 categories of workers and a general agreement for the increase in remuneration of salaried employees.⁴ For salaried employees, in-

³ Average exchange rate of lira in March 1940 = 5.05 cents. Kilogram = 2.2046 pounds.

⁴ *Il Lavoro Fascista*, Rome, Mar. 24, 1940.

creases authorized were as follows: Third category (routine workers), 15 percent; second category (ordinary salaried employees), 12 percent; and first category (salaried employees having administrative functions), 10 percent. The rate of increase for all port workers was the maximum, 15 percent, and for all street-railway workers 12 percent; for the other industrial groups considerable variation in percentage increases for different occupations was seen—from 10 to 15 percent—with the greatest detail shown in the clothing industry. Increases agreed upon by the federations of agriculturists and agricultural workers in both agricultural and industrial enterprises varied between the same limits.

The Minister of Finance has ruled that the wage increases shall not be counted a part of the minimum taxable for purposes of income tax.⁵

⁵ *Il Lavoro Fascista*, Rome, Mar. 30, 1940.

Employment and Labor Conditions

EMPLOYMENT PROSPECTS IN THE TUNG-OIL INDUSTRY

THE expansion of tung- or China-wood-oil production in the United States to a level adequate to meet the demand for such oil in this country would employ 200,000 persons. This is one conclusion of a report on this industry in Mississippi which has just been published by the National Youth Administration of that State.¹

At present the United States uses 75 to 80 percent of the world production of tung oil—a requisite in the making of paints and varnishes—but has never produced over 2 percent of the world output. It is also pointed out in the same report that in the Southern States there are approximately 1,000,000 acres of land which could with profit be planted with tung trees. There are only about 180,000 acres of tung trees in this country, and these are mainly in the South.

In addition to being a highly important ingredient in paint and varnishes, tung oil is used in several hundred other industrial products, among them printers' ink, waterproofing, and plastics. It is estimated that industries in the United States will in the future absorb 400,000,000 pounds of tung oil per annum, as compared with 87,415,000 pounds in 1938.

Tung-Oil Production in China

For thousands of years tung oil has been in use in China—its country of origin. Groves and new plantings, however, have been for the most part on waste land, rocky hillsides, and roadsides ill adapted to farming. Furthermore, the increasing dependence of overpopulated China upon all available arable land for food crops has resulted in a loss of interest in the systematic commercial planting or cultivation of tung trees. The small subdivisions of land in that country also tend to restrict the development of large tung plantations. Trade channels have been seriously interfered with by the undeclared war in China.

Hand labor, combined with crude machinery, is used throughout the Chinese tung-oil sections. Large amounts of oil are wasted, and that which is secured is of an inferior quality, generally mixed with dirt and other matter.

¹ National Youth Administration for Mississippi, *Tung Oil Production in Mississippi*, An industrial study, Jackson, 1940; also, National Youth Administration press release, June 19, 1940.

Experience has shown the business risks associated with dependence upon a single foreign market for obtaining a basic raw material for which the demand in this country has continued to be large.

Development of the Industry in the United States

The evolution of the tung-oil industry in the United States has been stimulated by the high prices of imported tung oil, its inferior quality, the constant demand for the raw material, the uncertainty of importations, and the growth of new industrial uses for this product, as well as profit incentives.

Wide research concerning the substitution of tung oil for linseed oil in ordinary paints is apparently resulting in an increase in such substitutions.

Chemists have reported that a highly profitable market for tung oil for use in the making of plastics would result from an increased supply of the product. Tung-oil meal, a by-product of tung oil, has important possibilities. Some chemists have predicted that its value will surpass that of the oil itself when this meal is used to its full extent.

Commercial production of tung oil in the United States was begun in 1932 with the shipping of two tanks of this oil from Gainesville, Fla. In 1934 about 400,000 pounds of this oil were produced from tung nuts grown in the Gulf States. The crop for 1938 produced approximately 4,000,000 pounds of tung oil. At the present time the major production regions are northern Florida, southern Mississippi, Georgia, Alabama, Louisiana, and the Gulf Coast area of Texas.

Tung production involves: 1. Clearing land and planting, fertilizing, cultivating, and harvesting tung trees; 2. The extraction of oil from tung nuts. Large tung plantations in Mississippi are usually operated by one of three classes of owners—individuals, tung promoters, and lumber companies.

Leaving aside the price of land, which varies considerably, it is estimated that the cost of clearing the land and the purchase and planting of nursery trees, together with the costs of cultivation, growing, etc., for 5 years, would be from \$50 to \$150 or more an acre.

A high estimate of costs for the first 5 years would be \$150 per acre, including all expenditures. Annual expenses per acre thereafter might approximate \$15 per year for cultivation and fertilization.

Based on a price of \$30 a ton, fruit yields would have to be 1,600 pounds per acre for a return of 6 percent on the investment. Of course, this merely represents an average and might vary greatly in either direction. Average per acre yields for all plantings thus far have been much less than 1,600 pounds per acre.

The Job Outlook

In the judgment of the author of the report under review, "it is certain that as the American tung industry becomes of age in the Southern States, more and more persons will find jobs in that industry. Probably job possibilities will arise that are now not contemplated. However, at the present time there is no shortage of labor, except possibly during the harvesting season, and such work, being extremely seasonal, lasts only for 60 to 90 days."

The fact that the tung-oil industry is a new one in the United States, and other reasons bound up with the nature of agricultural production, make employment opportunities in the industry indefinite and uncertain. Moreover, no job divisions, wage scales, or promotion lines have ever been definitely established. The industry is unorganized and employment in it is seasonal even in the tung mills, as the nuts must be processed within 6 months after they are harvested.

Wages in the tung industry are from 80 cents and \$1.00 per day for unskilled laborers to \$2 and \$2.50 per day for semiskilled workers. Clearing, cultivating, and harvesting are done by common laborers. The semiskilled laborers include tractor drivers, truck drivers, crew foremen, and tung-mill machine operators (firemen, oilers, expeller men, helpers, and lay-out men). Among the skilled employees in the industry are farm managers, who receive from \$30 to \$35 per week, laboratory technicians at \$125 per month, and bookkeepers and stenographers at \$65 per month. Individual farmers may make approximately \$10 an acre per annum, while promoters may earn up to \$5,000 a year.

Employment in the tung industry in Mississippi may be estimated as follows:

	<i>Persons</i>
10,000 acres of new land cleared each year.....men.....	400
2 mills operating in Mississippi.....do.....	25
100,000 acres in cultivation.....do.....	500
Harvesting 60,000 acres.....	3, 500
Promoting and managing.....	50
Laboratory.....	3
Secretarial.....	5

The many employment shifts in the tung industry because of its seasonal character impede any intelligent vocational planning. Unless a person has had previous training or has substantial financial backing, he has little chance to develop or make progress in this industrial field.

Generally speaking, the small number of higher salaried positions in the industry have been held by persons who have not come up from the ranks. As a rule, common laborers and helpers are not promoted, while trained men for the more skilled types of work are brought into the industry.

Interest of Other Countries in Tung Production

According to another report,¹ six countries—Argentina, Brazil, New Zealand, Transvaal, Rhodesia, and Soviet Russia, have recently begun experimenting in the growing of tung trees, with a view to breaking up China's monopoly in a now indispensable oil.



AGE AND OCCUPATION OF UNEMPLOYED MEN IN GREAT BRITAIN ²

MEN of all ages benefited from the 34-percent reduction in the number of unemployed registered in Great Britain from May 1939 to March 1940. The decrease was most marked in the lower age groups. For men under 30 years of age, the reduction amounted to 45 percent; it was 16 percent for those over 50. In consequence, men over 50 formed a much larger proportion of the total unemployed in March 1940 (42.1 percent) than in May 1939 (32.8 percent). Nearly 60 percent of those registered as out of work in March of this year were 40 years of age and over. The number of unemployed men and the percentage distribution are shown by age groups in the following table.

Number of Unemployed Men in Great Britain, Classified by Age

Age group	Mar. 11, 1940		May 1, 1939	
	Number	Percent of total	Number	Percent of total
All age groups.....	631,464	100.0	963,319	100.0
18 to 20 years.....	30,766	4.9	47,114	4.9
21 to 24 years.....	48,097	7.6	96,302	10.0
25 to 29 years.....	61,008	9.7	112,677	11.7
30 to 34 years.....	56,862	9.0	107,464	11.2
35 to 39 years.....	58,565	9.3	105,066	10.9
40 to 49 years.....	110,012	17.4	178,283	18.5
50 years and over.....	266,154	42.1	316,413	32.8

Workers 50 years of age and over made up 45 percent of the unemployed who were classified as laborers in the March count. For other occupations, including those in which a higher degree of skill was involved, 39.7 percent of the total were in this age group. For three age groups, the percentage distribution by two main occupational classes follows:

	Percent of total	
	Laborers	Other
18 to 29 years of age.....	18.6	25.3
30 to 49 years of age.....	36.4	35.0
50 years of age and over.....	45.0	39.7

¹ Credit and Financial Management, New York, October 1938: 'Tung Oil,' a "New Industry" Blossoms in the South, by Leonard Philips.

² Great Britain. Ministry of Labor Gazette, London, May 1940.

In individual occupations, classified as other than laborers, the proportion of the unemployed aged 50 and over ranged from 15.7 percent of the total among truck drivers to 71.4 percent among watchmen. General laborers for light work had the highest percentage unemployed in the 50 years and over group (59.0 percent of the total), followed by colliery laborers (54.9 percent).



LABOR DEVELOPMENTS IN THE PERUVIAN TEXTILE INDUSTRY, 1940¹

Creation of Textile Labor Board

A TEXTILE Labor Board (*Comisión de Trabajo Textil*) was created in Peru by an executive decree of March 9, 1940, following several months' agitation for a 50-percent wage increase and other demands by the union of textile workers.

The Board, which is to be composed of representatives of the employers, the workers, and the Government, will formulate and submit to the Government for approval a textile labor code (*reglamento de trabajo en la industria textil*), which will cover the following points: Representation of the workers before employers and the Government; establishment of commissions to consider and settle the complaints of workers, and to establish rules of procedure to be followed with respect to complaints; revision of rules made by labor groups for determining the obligations of laborers, journeymen, technicians, and administrators, and for maintaining harmonious relations among them; rules for evaluating technical and disciplinary offenses, and prescribing suitable penalties; standards for the regulation of remuneration, especially for women and apprentices, job work, and overtime; regulations regarding the intervention of the Commission at the request of any industrial concern which may consider its economy adversely affected by competition; rules as to work by shifts and for night work; rules for the application of laws on hours, attendance, weekly rest, and vacation; regulations as to labor hygiene, safety, and prevention of diseases and accidents; and rules for solving all other questions of a controversial character.

The Commission will investigate causes for revision and modification of the wage scale, whether of a general nature or limited to one or several industrial entities.

Until the preparation of the textile labor code, differences between employers and workers in the textile industry which are pending or may arise will be subject to the jurisdiction of the special commissions

¹ From report of Julian Greenup, commercial attaché at the American Consulate General, Callao-Lima, Peru.

referred to above, which will abide by the prevailing labor legislation insofar as it may be found applicable.

According to the preamble to the decree, the diverse complaints made to the authorities by the workers in the textile industry revealed the necessity of finding a general solution which would eliminate the causes thereof. It is reported that employees as well as employers look upon this decree with favor, and that the pending demands have been withdrawn for subsequent hearings in the manner outlined.

School of Textile Technology

A school of textile technology is to be opened in Lima during the second half of 1940 and will be operated under supervision of the Government, under a decree of March 9, 1940. Its purpose is improvement of the quality of hand work, perfection of the practical knowledge of textile workers, increased production, and economy of effort of workers by greater utilization of machinery.

Workers and employers in the industry will cooperate for the coordination of the technical instruction with actual practices in the industry.



LABOR CONDITIONS IN AGRICULTURE IN EAST PRUSSIA, GERMANY

THE present German Government has set up lower labor standards for non-German than for German workers. How far the two standards differ is indicated by the labor rules issued by the State labor trustee of East Prussia on May 17, 1940,¹ fixing the labor conditions of farm hands in the District of Zichenau, Province of Suwalki, and District of Soldau, Province of Reidenburg.

The term of the employment contract is 1 year.

The length of the working day varies in accordance with the season, from 6½ hours in winter to 12 hours in summer for non-German farm hands and from 6½ hours in winter to 10½ hours in summer for German farm hands. These are actual hours of work. One and one-half hours in winter and 2 hours in summer are granted for lunch.

Money wages of married German farm hands are 15 marks ² per month in winter and 22 marks in summer. Married non-German farm hands in Suwalki Province receive monthly, in money wages, 6 marks in winter and 9 marks in summer. In Zichenau and Soldau districts they receive 8 marks in winter and 12 marks in summer.

¹ Germany, Reichsarbeitsministerium, Reichsarbeitsblatt, Berlin, May 25, 1940, pt., IV, February 25, 1940, pt. VI.

² Mark in April 1940=40.1 cents.

Payment per hour for overtime, Sunday, and holiday work is approximately twice as high for German as for non-German farm hands.

The married farm hands receive 28 hundredweights of grain—wheat, peas, barley, rye, and mixed grain—per year. German farm hands receive the same amount of grain plus 3 hundredweights of rye per year. Married farm hands have free housing and barns for their animals. For heating, non-German farm hands receive 60 hundredweights and German farm hands 70 hundredweights of soft or brown coal briquets.

Industrial Relations

PERSONNEL POLICIES IN BANKS

PRESENT personnel policies in a representative group of banks are described in a recent report¹ by the industrial relations section of Princeton University. The study affords a view of the trends and some of the changes in personnel relations in banks during the past 5 years, as similar data were supplied by 50 banks in 1934.² Data were secured from 48 of the same group in 1939 or 1940. Only 14 of these banks had fewer than 500 employees, while 28 had from 500 to 3,000 employees, and 6 had from 3,000 to 10,000 employees.

Among the larger banks it appeared there was a trend towards centralizing personnel administration under one executive whose chief duties are the development of personnel programs and supervision of personnel activities. Nearly half of the banks surveyed had such an officer, while nearly as many more reported that personnel matters were centered under one executive who, however, had other important duties. In only a few of the banks were personnel activities carried out by various department heads with no provision for centralized planning or control. In addition to the increased recognition of the importance of personnel supervision, there was evident a more important trend toward the development of broad personnel policies adapted to the needs of the whole organization. In companies having up to about 1,000 employees, the executive in charge of personnel may be able to handle all phases of the problem; but in much larger companies, in order to develop a broad program, the personnel office usually finds it necessary to have assistants to handle specific activities. A development among the more progressive banks has been the recognition of the necessity not only for the development and supervision of specific activities but also for the integration of these activities with the operation of the bank as a whole.

Employee Organization

Collective bargaining has not been entered into in most cases and in none of the banks covered by the study have the regular employees

¹ Current Policies in Personnel Relations in Banks. By Helen Baker. Princeton University, Industrial Relations Section, 1940.

² See Monthly Labor Review, July 1935, pp. 56-61.

been organized by outside unions. A few banks, however, have signed agreements with locals of the United Office and Professional Workers of America. There are two employee associations, one established in 1936 and one in 1937, neither of them being affiliated with a national federation. In one case an agreement was signed which specified the subjects which would be referred for negotiation and provided that there should be no strikes nor lock-outs. The bargaining strength of this association was sufficient to secure an increase in salaries and more definite adherence to the 40-hour week, while definite grievance procedures and an advisory committee were established.

Employment Policies and Methods

New employees are frequently secured through recommendation by employees and customers, while other sources of supply are schools and colleges, employment agencies, and individuals applying on their own initiative. There is no uniformity as between different banks in the sources of supply used. A majority of the banks encourage employees and customers to recommend persons for employment, although certain problems may arise in connection with this practice which have given rise to certain specific rules and procedures. Thus, it is customary not to employ close relatives in the same department, and in some instances two members of the same family may not be employed in the same bank. Training young persons from the start has certain advantages and also permits a wider use of general recommendations, but centralized employment with preemployment tests and established job standards acts as a deterrent to the hiring of recommended individuals.

Special policies followed in the hiring of new employees are concerned principally with age, education, and sex. The lower hiring age limit is usually 18, and to many banks the minimum age seems the most satisfactory age. The earlier study showed that few older persons were hired and apparently there is no change in this policy. If an older person with special training and experience is required most banks do not hire men much over 40. This is partly because the building up of an adequate annuity is of importance, but principally because of the feeling on the part of bank officials that executives as well as the clerical staff should be trained within one organization.

The minimum educational requirement in most cases is the completion of high-school work. There are varying attitudes towards the employment of young college graduates, due largely to experiences in the depression when it was impossible to advance these men. However, it is generally felt that a certain proportion of college graduates at least should be hired. There is little new information on policies

as to the employment of women, who are hired principally for stenographic and bookkeeping jobs, but the majority of banks as well as other financial companies refuse to keep woman employees after marriage. No decided changes in employment policies were reported in 1939 as compared with 1934, but tests were apparently being used increasingly, intelligence tests in many cases being used both in the selection of new employees and in determining promotions of older workers.

Salary Administration and Promotion

In the 1934 study it was found that comparatively few banks had a formal job-classification program, but the present study showed that more progress had been made in this field than in any other personnel activity, as the number of banks reporting such a program had almost doubled. The policy of promotion from within is almost universally accepted among banks, although it has been demonstrated that this policy to be successful must be based on the integration of other basic personnel policies. "Specifically, employment, job classification, employee rating, and training are inseparable parts of an effective program of promotion from within. In addition, the need for improved coordination of all personnel moves is apparent in the majority of banks."

Educational Plans

The policy of promotion from within makes the educational programs for bank employees of special importance. The principal educational activity continued to be cooperation with the American Institute of Banking, which offers a wide range of courses in economics, money and finance, credit, and various aspects of bank management. These courses are supplied in the larger cities by local chapters of the Institute, while in smaller cities classes may be formed under a teacher approved by the Institute. In other cases individuals may arrange to take the courses by correspondence. About half of the banks surveyed pay all the tuition for these courses, and the majority of the remainder pay half of the tuition or refund according to the grade received. Encouragement is given by a large number of banks to employees for outside study.

In addition to the study courses offered employees, most of the banks recognize the need for continuous training within the organization, although comparatively few have established formal programs or centralized planning and supervision of training.

Plans for Financial Security

Banks have met the need for financial reserves for unforeseen emergencies and the more certain contingency of old age by various

methods and plans. The most common protection provided for bank employees is group life insurance, but provisions for an assured income after retirement have been made by many banks in the past 10 years. The enactment of the Federal Social Security Act, instead of proving a deterrent to such plans, has apparently had the effect of encouraging their adoption.

Group life insurance was reported by all but a few of the banks surveyed and two of these had death-benefit funds. In one case the group life-insurance plan had been discontinued and in several others slight changes in the plans had been made, principally in the direction of making the insurance for the higher salaried officers and employees contributory and of providing higher benefits. There are about an equal number of contributory and noncontributory plans.

Health insurance is comparatively rare in this group of banks, but during the past few years wide cooperation with group hospitalization associations has been developed. In general, provision for continued income during illness is provided through sickness benefits and liberal leaves of absence. In 10 cases there was a definitely formulated policy as to sick leave with stated provisions as to the length of time an employee's salary can be continued, while many banks reported they have a liberal policy as regards sick leave without specifying the exact benefits.

Formal pension systems are in force in more than half of the banks surveyed. Seven such plans had been established since 1934. Three banks were making a study of plans with a view to their institution. Of the plans in effect 24 are contributory and only 3 are paid for entirely by the company. Informal plans by which all employees of 65 years of age and the required service receive some income after retirement are in effect in 10 banks. Altogether three-fourths of the banks provide pension as a matter of right after a long period of service, while the remaining banks give some attention to the problem of superannuation but award pensions according to individual needs and entirely at the discretion of the management. A definite trend in annuity plans is toward equal contributions by the management and employees for current service, with the company assuming larger responsibility for the accrued liability for past service. Since the 1939 amendments to the Social Security Act clarified the status of employees of National and State banks which are members of the Federal Reserve System, in relation to the act, both new and revised plans are making allowances for this compulsory insurance.

Health and Welfare Activities

Medical services provided by banks for their employees are usually very limited. In only four of the banks surveyed have extensive

medical departments been developed, and in these cases the objective is not to substitute the service for that of a personal physician but to insure the best working conditions in the bank from a health point of view. In most of the banks a small first-aid service in charge of a nurse, with a physician in attendance at specified hours or on call, is maintained, the service being restricted to treatment of slight injuries or minor ills, and advice as to needed medical care.

There has been a slight increase in the number of banks requiring physical examinations. Slightly more than half of these banks require examinations for new employees and nine either require or offer annual examinations to all or certain classes of their employees. In only one instance is there a compulsory annual examination for all employees, although several require examination of employees over 40 years of age or those with poor medical histories.

Clubs organized for social, athletic, or educational purposes were reported by almost three-fourths of the banks. These clubs receive varying degrees of financial assistance from the banking companies, but while they are usually encouraged by the management no responsibility is taken for their functioning.

Hours of Work and Vacations

Adjustment of working hours to the requirements of the Fair Labor Standards Act without a burdensome increase in the pay roll has presented a difficult problem to bank management. The action taken to meet the hours requirements has been through improvements in internal administration and cooperative action in reducing the number of hours per day or week in which the banks are open to the public. Large banks have been able by careful administration to meet the requirements of the hours law without much overtime at punitive rates. The situation has been more difficult, however, for smaller banks in communities where the normal workweek has been 45 hours or over. These banks have been unable to operate even on a 42-hour week without an increase in personnel or a considerable amount of overtime. In these cases attempts are being made to reduce public banking hours either by cooperative action or through legislation.

The granting of vacations with pay for all employees has long been a generally accepted policy in banks. During the 5-year period since the last study was made few changes have been made in vacation policies in these banks. Two weeks is the usual vacation for clerical employees with at least 1 year's service, and 3 weeks is frequently given to employees with from 5 to 20 years' service. The only changes reported are liberalization in some instances of the service requirement for an extra week's vacation.

AUSTRALIAN COAL-MINE STRIKE SETTLEMENT¹

WORK was resumed in the coal mines of Australia in the latter part of May, following the settlement of a general strike in the industry, which began on March 11, 1940. One of the major causes of the stoppage was a decision by the Commonwealth Court of Arbitration establishing longer hours of work for surface men than for underground workers. The settlement provided for resumption of work with the understanding that on the same day a conference should be called under the presidency of a judge of the Arbitration Court to discuss the miners' grievances and to determine outstanding differences between employers and employees. The mining unions agreed to maintain continuity of production during the war, and to refer all disputes to arbitration under the established procedure. The Federal Government undertook to withdraw all strikebreakers and to arrange with the Government of New South Wales to find employment for them elsewhere.

Conditions in 1938-40

The 1940 strike was the second of major importance in the industry in a short period. Practically all the mines were idle from September 9 to October 24, 1938. Demands having been made by the workers for better provisions for safety in and around mines, special workmen's compensation provisions, retirement on pension at the age of 60, a workweek of five 6-hour shifts, guaranteed minimum wages for employees engaged on piece work, paid vacations, and weekly instead of fortnightly wage payments. The matters in dispute were described by one of the judges of the Arbitration Court as being of a social rather than an industrial nature.

A settlement of the 1938 dispute was reached after negotiations in which the Federal and State Governments, employers, and employees were represented. The terms of the agreement provided for (1) continuance of the study of safety already referred to; (2) appointment of a royal commission to inquire into retirement for mine employees; (3) reference of the demands affecting hours, wages, and paid vacations to the Commonwealth Arbitration Court for settlement; and (4) expediting all inquiries and hearings.

Shortly before the 1938 strike was called, a royal commission had been appointed by the Government of the State of New South Wales to inquire into the safety and health of workers in coal mines. This commission reported in 1939, recommending improved standards in the mines and certain concessions on the part of labor to promote industrial peace and to reduce absenteeism.² The recommendations

¹ Report of Elbert G. Mathews, American vice consul at Sydney.

² See Monthly Labor Review for April 1940, for a résumé of the findings.

of the royal commission dealing with safety and health were incorporated in a bill of the New South Wales Government that has not yet been approved. A royal commission was appointed in January 1940 to inquire into questions of compulsory retirement. Although public hearings of this commission were indefinitely suspended in April, owing to the existing strike, it was reported to be continuing its investigations.

Hearings were held on the questions of hours, a guaranteed minimum wage, paid vacations, and payment of wages at 1-week intervals. Three separate awards were made on June 29, 1939, by a single judge of the Arbitration Court. Final determination of standard hours for the coal-mining industry was reserved for the full court, it being stated that the interim awards just mentioned were tentative and subject to such minor modifications as might be found necessary in the 6 months during which they were to be applied.

Organized labor protested against establishment of a shorter workweek for underground than for surface workers, the loss of seniority rights as a penalty for unreasonable absences from work, and the principle of averaging rates of pay for junior workers throughout New South Wales, all of which were provided for in the interim awards. The unions obtained a stay of the hours provisions, pending the decision of the full court. However, on October 4, 1939, the full court established an even greater differential between the hours to be worked underground and on the surface. Underground labor was awarded a 40-hour week. Surface workers handling coal from the pit top to the wagons were also made subject to the 40-hour limitation, but for other surface labor the workweek was fixed at 44 hours (subject to certain prior exemptions).

Efforts on the part of mine workers to obtain more liberal terms of employment continued up to the beginning of March 1940, when the second strike was called. Throughout the period of the second strike the Government of Australia made every effort to secure a settlement. Wartime conditions made it imperative that the flow of coal should be continuous. Not only was the Government active in negotiations, but it also called upon owners to open their mines and call in free labor. Police protection was afforded by the Government, and some mines were actually opened during the strike.

Industrial Safety and Hygiene

INJURY EXPERIENCE IN THE IRON AND STEEL INDUSTRY, 1938 AND 1939 ¹

Summary

INDUSTRIAL injury rates of 1,861 identical departments within the iron and steel industry declined slightly in 1939 in both frequency and severity, as indicated by a study of the reports received by the Bureau of Labor Statistics. The frequency rate declined from 10.0 in 1938 to 9.7 in 1939, and the severity rate declined from 1.9 to 1.8.² An increase of 29.4 percent in the number of injuries and 23.9 percent in the days of disability was offset by an increase of 32.8 percent in hours of exposure. The highest frequency rate, 51.6, was recorded in the miscellaneous melting and rolling departments. Electric furnaces was second with a rate of 34.0. The highest severity rate was listed for ore docks and yards with 8.1. Electric-furnace departments were again second, with 4.1.

TABLE 1.—*Summary of Injury Data for 1,861 Identical Departments in the Iron and Steel Industry, 1938 and 1939*

Item	1939	1938	Percent of change, 1938 to 1939
Total employee-hours of exposure (in thousands).....	842, 305	634, 482	+32.8
Total number of injuries.....	8, 176	6, 318	+29.4
Total days of disability.....	1, 520, 887	1, 227, 650	+23.9
Frequency rate.....	9.71	9.96	-2.5
Severity rate.....	1.81	1.93	-6.2

The decrease in frequency and severity rates was not limited to one class of departments, but was general. In only one group—service and maintenance—was there an increase in frequency rate; in all others—melting and rolling, finishing, miscellaneous labor, and not elsewhere classified—the frequency rate was lower in 1939 than in

¹ This article was prepared by George R. McCormack, under the direction of Swen Kjaer, chief of the Bureau's Division of Industrial Accident Statistics.

² The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1937.

1938. The severity rate increased in 1939 in the service and maintenance and not elsewhere classified groups; in all others, it decreased.

For every thousand injuries there was 1 less fatality or permanent total disability in 1939 than in 1938 and an increase of 6 permanent partial disabilities. The average time lost for permanent partial disabilities decreased from 862 to 828 days, and for temporary total disabilities from 34 to 29 days. The service and maintenance class had the most fatalities, 32, and the most permanent partial disabilities, 157, per thousand injuries.

Injury Experience, by Department

Detailed injury data and the resulting injury rates in 1939 and 1938 are given in table 2 for the various departments of the industry.

Melting and rolling.—For the 503 departments in this class, the exposure increased from 229 million employee-hours in 1938 to 328 million in 1939. This increase was accompanied by practically no change in the frequency rate, from 8.9 in 1938 to 8.8 in 1939, and a similarly slight decrease in the severity rate, from 2.1 to 2.0. Of the 16 department groups within this class, 6 had decreases in frequency rate and 8 had decreases in severity rate. All department groups experienced increases in exposure.

TABLE 2.—*Injuries and Injury Rates for 1,861 Identical Departments in the Iron and Steel Industry, 1938 and 1939*

Department	Number of departments	Em- ployee- hours (in thou- sands)	Number of injuries				Total time lost (days)	Fre- quen- cy rate ²	Sev- er- ity rate ³
			Total	Resulting in—					
				Death and per- manent total dis- abil- ity ¹	Per- ma- nent par- tial dis- abil- ity	Tem- po- rary total dis- abil- ity			
1939									
All departments ³	1, 861	842, 305	8, 176	(6) 115	751	7, 310	1, 520, 887	9. 71	1. 81
Melting and rolling.....	503	328, 075	2, 900	(2) 56	320	2, 524	672, 390	8. 84	2. 05
Bessemer converters.....	13	5, 635	37	1	6	30	13, 651	6. 57	2. 42
Blast furnaces.....	54	27, 109	158	8	26	124	82, 912	5. 83	3. 06
Electric furnaces.....	28	2, 293	78	1	1	76	9, 358	34. 01	4. 08
Open-hearth furnaces.....	73	46, 371	392	20	41	331	166, 955	8. 45	3. 60
Bar mills.....	18	7, 217	56	1	2	53	8, 530	7. 76	1. 18
Cold reduction.....	16	15, 917	144	1	29	114	35, 300	9. 05	2. 22
Cold rolling.....	17	7, 011	134	0	12	122	11, 863	19. 11	1. 69
Heavy-rolling mills.....	58	48, 822	306	(1) 9	40	257	93, 461	6. 27	1. 91
Hot mills.....	23	16, 828	291	0	20	271	21, 692	17. 29	1. 29
Hot-strip mills.....	19	20, 047	158	1	31	126	31, 931	7. 88	1. 59
Light-rolling mills.....	63	35, 195	385	(1) 6	37	342	76, 999	10. 94	2. 19
Plate mills.....	27	12, 673	79	2	12	65	22, 988	6. 23	1. 81
Rod mills.....	26	6, 785	59	1	7	51	14, 489	8. 70	2. 14
Sheet mills.....	37	31, 513	229	1	16	212	25, 365	7. 27	0. 80
Tube mills.....	27	44, 387	380	4	40	336	56, 605	8. 56	1. 28
Miscellaneous.....	4	272	14	0	0	14	291	51. 56	1. 07
Crucible furnaces.....	1	0	0	0	0	0	0	-----	-----
Puddling mills.....	3	272	14	0	0	14	291	-----	-----

See footnotes at end of table.

TABLE 2.—Injuries and Injury Rates for 1,861 Identical Departments in the Iron and Steel Industry, 1938 and 1939—Continued

Department	Num-ber of de-part-ments	Em-ployee-hours (in thou-sands)	Number of injuries				Total time lost (days)	Fre-quency rate ²	Se-ver-ity rate ³
			Total	Resulting in—					
				Death and per-manent total dis-abil-ity ¹	Per-ma-nent partial dis-abil-ity	Tem-por-ary total dis-abil-ity			
1939									
Finishing.....	452	185,651	2,855	(2) 15	192	2,648	296,674	15.38	1.60
Axle works.....	4	457	5	0	0	5	17	10.94	.04
Bolts and nuts.....	28	15,658	213	1	16	196	26,533	13.60	1.69
Car wheels.....	21	3,472	92	0	3	89	5,091	26.50	1.47
Cold drawing.....	10	3,362	44	1	5	38	12,146	13.09	3.61
Fabricating shops.....	67	24,282	400	(1) 8	36	356	85,125	16.47	3.51
Forge shops.....	70	25,107	444	0	31	413	30,938	17.68	1.23
Foundries.....	92	35,386	799	2	19	778	45,693	22.58	1.29
Galvanizing and tinning.....	46	26,305	219	1	21	197	25,532	8.33	.97
Nails and staples.....	14	2,716	16	0	3	13	1,473	5.89	.54
Stamping.....	23	11,945	158	0	22	136	16,975	13.23	1.42
Wire drawing.....	46	29,557	381	(1) 2	29	350	42,422	12.89	1.44
Wire springs.....	13	4,031	52	0	3	49	2,118	12.90	.53
Woven-wire fence.....	18	3,373	32	0	4	28	2,611	9.49	.77
Service and maintenance.....	660	174,274	950	30	149	771	341,784	5.45	1.96
Clerical and sales.....	317	40,453	29	0	2	27	1,737	.72	.04
Electrical.....	67	16,691	62	8	10	44	57,292	3.71	3.43
Mechanical.....	157	89,454	689	14	104	571	187,239	7.70	2.09
Ore docks and yards.....	4	388	4	0	1	3	3,138	10.32	8.09
Power houses.....	27	5,632	15	0	5	10	2,491	2.66	.44
Yards and transportation.....	88	21,657	151	8	27	116	89,887	6.97	4.15
Miscellaneous labor.....	202	137,666	1,125	(2) 13	75	1,037	171,237	8.17	1.24
Not elsewhere classified.....	44	16,639	346	1	15	330	38,802	20.79	2.33
Coke ovens.....	29	16,527	43	2	4	37	16,394	2.60	.99
Erecting.....	3	1,889	186	6	11	169	45,421	98.45	24.04
1938									
All departments ²	1,861	634,482	6,318	(4) 94	543	5,681	1,227,650	9.96	1.93
Melting and rolling.....	503	220,473	2,049	(1) 35	227	1,787	486,997	8.93	2.12
Bessemer converters.....	13	3,542	33	0	2	31	2,087	9.32	.59
Blast furnaces.....	54	19,669	107	1	8	98	23,788	5.44	1.21
Electric furnaces.....	28	2,150	48	0	0	48	1,299	22.32	.60
Open-hearth furnaces.....	73	30,675	230	6	25	199	69,885	7.50	2.28
Bar mills.....	18	4,713	36	1	8	27	10,069	7.64	2.14
Cold reduction.....	16	11,005	102	2	20	80	33,701	9.27	3.06
Cold rolling.....	17	5,351	112	2	6	104	20,321	20.93	3.80
Heavy-rolling mills.....	58	31,076	208	9	34	165	98,630	6.69	3.17
Hot mills.....	23	13,988	241	0	11	230	10,470	17.23	.75
Hot-strip mills.....	19	13,180	95	1	21	73	25,121	7.21	1.91
Light-rolling mills.....	63	22,702	229	3	21	205	42,745	10.09	1.88
Plate mills.....	27	9,268	70	1	12	57	18,478	7.55	1.96
Rod mills.....	26	4,414	28	0	5	23	2,359	6.34	.53
Sheet mills.....	37	21,433	210	(1) 2	24	184	53,160	9.80	2.48
Tube mills.....	27	36,177	296	7	30	259	74,848	8.18	2.07
Miscellaneous.....	4	130	4	0	0	4	36	30.69	.28
Crucible furnaces.....	1	2	0	0	0	0	0		
Puddling mills.....	3	129	4	0	0	4	36		

See footnotes at end of table.

TABLE 2.—Injuries and Injury Rates for 1,861 Identical Departments in the Iron and Steel Industry, 1938 and 1939—Continued

Department	Number of departments	Em- ployee- hours (in thou- sands)	Number of injuries				Total time lost (days)	Fre- quen- cy rate ²	Sev- erity rate ²
			Total	Resulting in—					
				Death and perma- nent total dis- abil- ity ¹	Perma- nent partial dis- abil- ity	Tempo- rary total dis- abil- ity			
1938									
Finishing.....	452	144, 193	2, 238	(2) 19	148	2, 071	292, 180	15.52	2.03
Axle works.....	4	309	5	0	1	4	364	16.19	1.18
Bolts and nuts.....	28	13, 559	192	0	18	174	22, 014	14.16	1.62
Car wheels.....	21	2, 705	50	1	0	49	7, 235	18.48	2.67
Cold drawing.....	10	2, 518	40	1	4	35	9, 744	15.89	3.87
Fabricating shops.....	67	20, 189	354	3	22	329	43, 478	17.53	2.15
Forge shops.....	70	18, 494	343	0	17	326	26, 311	18.55	1.42
Foundries.....	92	26, 024	573	(2) 8	18	547	76, 435	22.02	2.94
Galvanizing and tinning.....	46	21, 661	196	4	22	170	56, 777	9.05	2.62
Nails and staples.....	14	1, 969	11	0	1	10	614	5.59	.31
Stamping.....	23	9, 341	117	0	14	103	8, 958	12.53	.96
Wire drawing.....	46	22, 080	284	1	28	255	30, 624	12.86	1.39
Wire springs.....	13	2, 985	55	0	2	53	1, 405	18.43	.47
Woven-wire fence.....	18	2, 360	18	1	1	16	8, 221	7.63	3.48
Service and maintenance.....	660	136, 822	711	22	79	610	227, 631	5.20	1.66
Clerical and sales.....	317	39, 163	33	0	2	31	6, 487	.84	.17
Electrical.....	67	12, 514	47	5	5	37	34, 020	3.76	2.72
Mechanical.....	157	67, 174	521	9	66	446	123, 552	7.76	1.84
Ore docks and yards.....	4	277	0	0	0	0	0		
Power houses.....	27	4, 876	11	1	1	9	7, 059	2.26	1.45
Yards and transportation.....	88	12, 818	99	7	5	87	56, 513	7.72	4.41
Miscellaneous labor.....	202	110, 496	1, 023	(1) 17	80	926	197, 728	9.26	1.79
Not elsewhere classified.....	44	13, 498	297	1	9	287	23, 114	22.00	1.71
Coke ovens.....	29	12, 139	39	2	7	30	24, 936	3.21	2.05
Erecting.....	3	2, 786	278	4	13	261	41, 064	99.79	14.74

¹ Figures in parentheses show the number of permanent total-disability cases included.

² The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are those approved by the American Standards Association, 1937.

³ Except coke-oven and erection departments.

The 13 bessemer-converter departments had the outstanding decrease in frequency rate within the melting and rolling departments, falling from 9.3 in 1938 to 6.6 in 1939. Another notable decrease was in the sheet-mill departments where the frequency rate fell from 9.8 to 7.3. On the other hand, 3 department groups experienced considerable increases in frequency rates: The miscellaneous departments jumped from 30.7 in 1938 to 51.6 in 1939, electric furnaces from 22.3 to 34.0, and rod mills from 6.3 to 8.7. In 1939, blast furnaces had the lowest frequency rate with 5.8; the miscellaneous departments with only 272,000 employee-hours of exposure had the highest with 51.6. The electric-furnace group with over 2 million employee-hours had a frequency rate of 34.0.

The severity rate of five department groups decreased by at least one-third in 1939. In the sheet-mill departments the rate dropped

from 2.5 in 1938 to 0.8 in 1939, due almost entirely to a decrease of one permanent total and eight permanent partial disabilities, combined with an increase in exposure. The average time loss for permanent and temporary injuries also dropped; for permanent partial disability, from 1,317 days in 1938 to 678 days in 1939, and for temporary total disability, from 52 days to 40 days. In the cold-rolling departments, the absence of fatal and permanent total injuries was chiefly responsible for the decrease in severity rate from 3.8 to 1.7. The total time lost in 1938 was 20,321 days; in 1939 it was 11,863 days. There also was a decrease in the average time charge for permanent partial disability, from 875 to 763 days, and for temporary total disability, from 30 to 22 days. The severity rate for bar mills dropped from 2.1 in 1938 to 1.2 in 1939 because of a reduction in the number of permanent partial disabilities, 8 to 2, accompanied by a decrease in the average time charge for such injuries from 431 to 400 days. In heavy-rolling mills, large decrease in the average days lost for permanent partial injuries, 1,072 to 738, and temporary total injuries, 50 to 39, resulted in a considerable reduction in total time lost. This reduction, with a large increase in exposure, resulted in a drop in the severity rate from 3.2 in 1938 to 1.9 in 1939. A decrease of 3 fatalities in 1939, with their time-loss charge of 18,000 days and an increase in exposure, were the chief factors in the decrease in the severity rate for tube mills from 2.1 to 1.3. In addition to having the greatest drop in severity rate, sheet mills occupied the most favorable position during 1939 in rank by severity, 0.8. The highest severity rate was recorded in the electric-furnace departments with 4.1.

Five department groups more than doubled their severity rates. The inclusion in 1939 of one fatality and one permanent partial disability was chiefly responsible for the increase in days lost in the electric-furnace departments, 1,299 in 1938 to 9,358 in 1939. With only a slight increase in exposure, this raised the severity rate from 0.6 to 4.1. In the bessemer-converter departments an increase of one fatality and four permanent partial disabilities with an average increase of days lost from 300 in 1938 to 1,075 in 1939 caused an increase in days lost from industrial injuries from 2,087 to 13,651. This large increase, in spite of a 59-percent rise in exposure, raised the severity rate from 0.6 to 2.4. Similarly, an increase of one fatality and two permanent partial disabilities with an increase in average time charged, 390 to 943 days, resulted in a 514-percent increase in days lost from injuries within the rod mills. More than offsetting the 54-percent increase in exposure, the large increase in days lost raised the severity rate from 0.5 to 2.1. Because of an increase of 7 fatalities and 18 permanent partial disabilities in 1939, the severity rate of blast furnaces jumped from 1.2 in 1938 to 3.1 in 1939. All injuries in the miscellaneous-departments group were temporary, both in 1938 and 1939. In 1939,

however, the injuries were more serious, causing an average disability of 21 days compared with an average of only 9 in 1938.

Finishing.—While the exposure of this class increased 29 percent, from 144 million employee-hours to 186 million, the number of injuries increased nearly 28 percent, from 2,238 to 2,855; but days lost increased only 1.5 percent, from 292,180 to 296,674. This resulted in a decrease in both the frequency rate, from 15.5 to 15.4, and the severity rate, from 2.0 to 1.6. The decrease in severity rate is due primarily to a reduction in fatalities and permanent total disabilities and the increased exposure.

Substantial decreases in frequency rates were recorded by axle-works, wire-springs, and cold-drawing departments; increases were registered in car-wheel and woven-wire fence departments. Although there were the same number of injuries in both years in the axle-works departments, the increase in exposure caused the frequency rate to drop from 16.2 in 1938 to 10.9 in 1939. In the wire-springs departments there was a slight decrease in the number of disabling injuries, 55 to 52, with a large increase in exposure, from slightly less than 3 million employee-hours in 1938 to more than 4 million in 1939, resulting in a decrease in the frequency rate from 18.4 to 12.9. A considerable increase in exposure in the cold-drawing departments more than offset the slight increase in the number of injuries, and as a result the frequency rate dropped from 15.9 to 13.1. Increases in exposure did not keep pace with the increase in the number of injuries in the car-wheel and woven-wire fence departments. Consequently the frequency rate of the first rose from 18.5 to 26.5, and of the second from 7.6 to 9.5. Nail and staple departments had the most favorable rate—5.9—in 1939. The large increase in frequency rate placed the car-wheel departments, with 26.5, as the highest rate in this group of departments.

Axle works, which had the greatest decrease in frequency rate, from 16.2 to 10.9, also had the greatest decrease in severity rate, dropping from 1.2 in 1938 to less than 0.1 in 1939, due to the absence of fatal and permanent disabilities. Other sizable decreases were recorded in the woven-wire fence departments, galvanizing and tinning departments, and foundry departments. The tendency to injuries of a less serious nature, even with a decided increase in the frequency rate, resulted in a drastic reduction in the severity rate in the woven-wire fence departments—from 3.48 in 1938 to 0.77 in 1939. A decrease of 3 fatalities coupled with a decrease of total days lost was instrumental in causing the severity rate in the galvanizing and tinning departments to fall from 2.6 in 1938 to 1.0 in 1939. Days lost for permanent disabilities averaged 664 in 1939 against 1,241 in 1938; for temporary disabilities the average time lost was 28 days in 1939 and 32 days in 1938.

The decrease in the number of fatal and permanent total disabilities, from 8 in 1938 to 2 in 1939, was responsible for the drop in severity rate in the foundry departments from 2.9 to 1.3. In the fabricating shops the severity rate rose from 2.2 to 3.5, due primarily to an increase of 5 fatalities or permanent total disabilities, the addition of 14 permanent partial disabilities accompanied by an increase in the average time charge per permanent injury from 755 days in 1938 to 799 in 1939, with but a small increase in exposure. The increase in severity rate in the stamping departments, from 1.0 to 1.4, can be traced to the increase in permanent partial disabilities from 14 to 22, with an increase in the average days lost for each of these from 504 to 666 days and only a slight increase in exposure. The lowest severity rate in this class was recorded by the axle works, with less than 0.1. The cold-drawing department group had the highest severity rate, 3.6, followed closely by fabricating shops with 3.5.

Service and maintenance.—An increase of 33.6 percent in the number of disabling injuries in 1939 over 1938, with an exposure increase of only 27.4 percent, resulted in an increase of the frequency rate from 5.2 in 1938 to 5.5 in 1939. An increase in the number of fatalities and permanent disabilities caused an increase in the severity rate from 1.7 to 2.0. The number of permanent injuries in 1939 rose 88.6 percent over 1938, from 79 to 149. Of the 6 department groups in this class, only 2 had increases in frequency rate and 3 had higher severity rates. All groups had increases in exposure; the total of the class increased from 137 million employee-hours in 1938 to 174 million in 1939.

The frequency rate of the clerical and sales group dropped slightly, from 0.8 to 0.7, and of the yards and transportation group from 7.7 to 7.0. The frequency rate of the small number of reporting departments for ore docks and yards, where no accidents occurred in 1938, rose to 10.3, the highest rate of the entire class. Powerhouses also had an increase in the frequency rate from 2.3 to 2.7. Clerical and sales departments had the lowest rate—0.7.

The clerical and sales departments also showed a decrease in severity rate of injuries, which declined from 0.2 to less than 0.1. Although the powerhouse departments listed an increase in frequency rate, 2.3 to 2.7, the severity rate dropped from 1.5 to 0.4, because no fatal injuries occurred in this group in 1939. Sizable increases in severity rate occurred in ore docks and yards, 0.0 to 8.1; and electrical departments, 2.7 to 3.4. Clerical and sales departments had the lowest severity rate with less than 0.1, and ore docks and yards the highest, 8.1.

Miscellaneous.—The frequency rate for miscellaneous labor decreased from 9.3 in 1938 to 8.2 in 1939 and the severity rate dropped from 1.8 to 1.2. This was caused by a decrease of 4 in the number

of fatal and permanent total injuries during 1939. There was also a decrease of 5 permanent partial disabilities, but accompanied by an increase in average disability from 799 to 879 days.

The frequency rate of a small group of establishments, shown as not elsewhere classified because of insufficient information to list by departments, decreased from 22.0 in 1938 to 20.8 in 1939. The severity rate of this class, however, increased from 1.7 to 2.3 because of an increase in the number of permanent partial disabilities from 9 to 15, with an increase in the average disability from 1,094 days in 1938 to 1,780 in 1939, and with little change in exposure.

Because coke-oven and erecting departments do not properly fall within the iron and steel classification, although regular departments in several large iron and steel establishments, the figures are listed separately and are not included in the totals for the industry. The extremely high frequency rate for the erecting departments fell off slightly in 1939, from 99.8 to 98.5, but was accompanied by a considerable increase in the severity rate, from 14.7 to 24.0.

Disability Distribution

The shift to injuries of a less serious nature is shown in detail in table 3. The number of fatalities, permanent disabilities, and temporary total disabilities per thousand injuries is listed for each department. During 1939 for the industry as a unit, there was one less fatality and permanent total disability and six more permanent partial disabilities than during 1938. The average time charge per permanent partial injury, however, decreased from 862 days in 1938 to 828 days in 1939. As the figures for fatalities and permanent disabilities increase, the figure for temporary total disabilities must necessarily decrease. For each thousand injuries in 1939 there were 894 temporary disabilities with an average time loss of 29 days; in 1938, there were 899 such injuries with an average time loss of 34 days.

The tendency to less serious injuries is shown particularly in the finishing class and the miscellaneous-labor group. In the former, there were 3 less deaths and permanent total disabilities per thousand injuries and only 1 more permanent partial disability. The average time charge for permanent partial disabilities decreased from 796 days to 763. The average time lost for each temporary injury also dropped from 29 to 23 days. In the miscellaneous labor group, fatalities and permanent total disabilities dropped from 17 per thousand injuries to 12, and permanent partial injuries from 78 to 67. The decrease in permanent partial injuries, however, was accompanied by an increase in average time charge per disability, from 799 days to 879. The average time lost for temporary total disabilities, however, dropped from 34 to 26 days.

TABLE 3.—*Disability Distribution per 1,000 Injuries, and Average Days Lost, in the Iron and Steel Industry, by Departments, 1938 and 1939*

Department	Number per 1,000 injuries						Average days lost per disability ¹			
	Death and permanent total disability		Permanent partial disability		Temporary total disability		Permanent partial disability		Temporary total disability	
	1939	1938	1939	1938	1939	1938	1939	1938	1939	1938
All departments.....	14	15	92	86	894	899	828	862	29	34
Melting and rolling.....	19	17	110	111	871	872	783	903	34	40
Bessemer converters.....	27	0	162	61	811	939	1,075	300	40	48
Blast furnaces.....	51	9	165	75	784	916	1,140	1,575	42	53
Electric furnaces.....	13	0	13	0	974	1,000	1,800	0	21	27
Open-hearth furnaces.....	51	26	105	109	844	865	810	1,008	42	44
Bar mills.....	18	28	36	222	946	750	400	431	33	23
Cold reduction.....	7	20	201	196	792	784	881	895	33	48
Cold rolling.....	0	18	90	54	910	928	763	875	22	30
Heavy-rolling mills.....	29	43	131	163	840	794	738	1,072	39	50
Hot mills.....	0	0	69	46	931	954	833	441	19	24
Hot-strip mills.....	6	11	196	221	798	768	639	729	49	52
Light-rolling mills.....	16	13	96	92	888	895	836	855	29	33
Plate mills.....	25	14	152	171	823	815	633	850	52	40
Rod mills.....	17	0	119	179	864	821	943	390	37	18
Sheet mills.....	4	10	70	114	926	876	678	1,317	40	52
Tube mills.....	11	24	105	101	884	875	553	720	31	43
Miscellaneous.....	0	0	0	0	1,000	1,000	0	0	21	9
Finishing.....	5	8	67	66	928	926	763	796	23	29
Axle works.....	0	0	0	200	1,000	800	0	300	3	16
Bolts and nuts.....	5	0	75	94	920	906	1,059	981	18	25
Car wheels.....	0	20	33	0	967	980	900	0	27	25
Cold drawing.....	23	25	114	100	863	875	1,140	675	12	30
Fabricating shops.....	20	8	90	62	890	930	799	755	24	27
Forge shops.....	0	0	70	50	930	950	716	1,006	21	28
Foundries.....	3	14	24	31	973	955	845	781	23	26
Galvanizing and tinning.....	5	20	96	112	899	868	664	1,241	28	32
Nails and staples.....	0	0	188	91	812	909	300	300	44	31
Stamping.....	0	0	139	120	861	880	666	504	17	19
Wire drawing.....	5	4	76	99	919	897	734	439	26	48
Wire springs.....	0	0	58	36	942	964	450	300	16	15
Woven-wire fence.....	0	56	125	56	875	888	488	1,800	24	26
Service and maintenance.....	32	31	157	111	811	858	887	904	38	40
Clerical and sales.....	0	0	69	61	931	939	400	2,900	35	22
Electrical.....	129	106	161	106	710	788	695	450	53	48
Mechanical.....	20	17	151	127	829	856	798	800	35	38
Ore docks and yards.....	0	0	250	0	750	0	3,000	0	46	0
Power houses.....	0	91	333	91	667	818	390	500	54	62
Yards and transportation.....	53	71	179	51	768	878	1,352	2,020	46	51
Miscellaneous labor.....	12	17	67	78	921	905	879	799	26	34
Not elsewhere classified.....	3	3	43	30	954	967	1,780	1,094	18	25

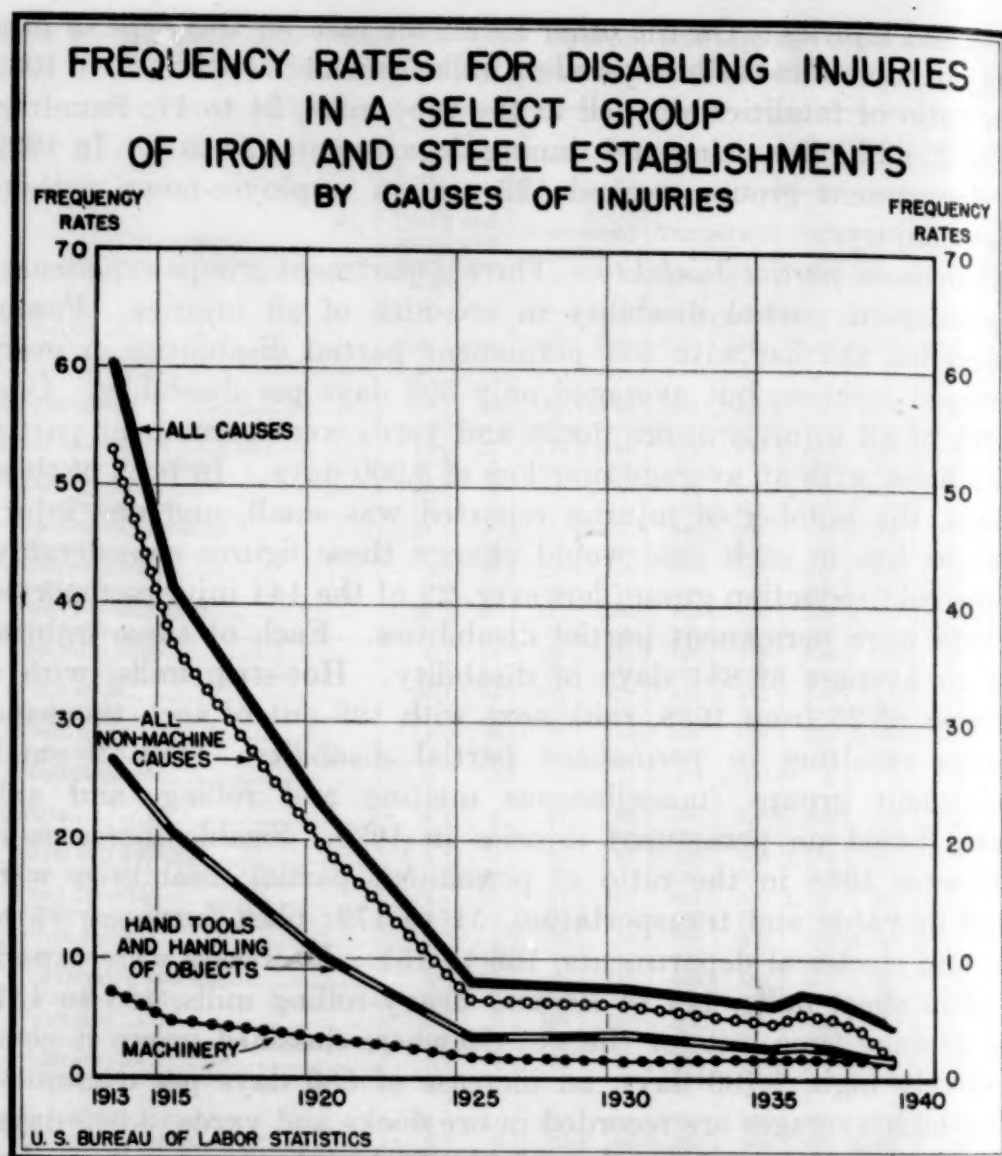
¹ Each death or permanent total disability is charged with a time loss of 6,000 days.

Death and permanent total disability.—Five percent of all lost-time injuries in 4 department groups were listed as fatalities or permanent total disabilities in 1939. The electrical departments ranked highest with 129 deaths or permanent total disabilities per thousand injuries. This was an increase of 23 over 1938 and occurred with a slight decrease in frequency rate, 3.8 in 1938 to 3.7 in 1939, but with a considerable increase in the severity rate, 2.7 to 3.4. Yards and transportation departments had 18 fewer disabilities of this type in 1939 than in 1938, but still ranked second with 53 per thousand injuries. Blast furnaces, with an increase of 42, and open-hearth furnaces, with an increase of 25, both recorded 51 deaths or permanent total disabilities per

thousand injuries. On the other hand, the rate for this type of disability decreased in the heavy-rolling mills from 43 in 1938 to 29 in 1939. The ratio of fatalities also fell in the tube mills, 24 to 11; foundries, 14 to 3; and galvanizing and tinning departments, 20 to 5. In 1939, 13 department groups worked 122 million employee-hours without a fatal injury.

Permanent partial disability.—Three department groups experienced a permanent partial disability in one-fifth of all injuries. Power-houses led the list with 333 permanent partial disabilities in every thousand injuries, but averaged only 390 days per disability. One-fourth of all injuries in ore docks and yards were permanent partial disabilities, with an average time loss of 3,000 days. In both of these groups, the number of injuries reported was small, and one injury more or less in each case would change these figures considerably. In the cold reduction group, however, 29 of the 144 injuries reported in 1939 were permanent partial disabilities. Each of these injuries had an average of 881 days of disability. Hot-strip mills, with a decrease of 25 from 1938, rank next with 196 out of each thousand injuries resulting in permanent partial disability. Only 2 small department groups (miscellaneous melting and rolling, and axle works) listed no permanent injuries in 1939. Sizable increases in 1939 over 1938 in the ratio of permanent partial disabilities were found in yards and transportation, 51 to 179; blast furnaces, 75 to 165; and electrical departments, 106 to 161. Decreases were experienced in sheet mills, 114 to 70; and heavy-rolling mills, 163 to 131. The average time lost for the not-elsewhere-classified group is comparatively high, 1,780 days, an increase of 686 days per disability. Other high averages are recorded in ore docks and yards, 3,000 days; and electric furnaces, 1,800 days, both of which have a small number of permanent partial disabilities.

Temporary total disability.—A high number of injuries of this type per thousand reflects injuries of a minor nature. Two small groups list all injuries as temporary—miscellaneous melting and rolling departments, and axle works. Other groups with a high ratio of temporary injuries include electric furnaces, 974; foundries, 973; and car wheels, 967. Considerable increases in 1939 in the ratio of temporary injuries were found in rod mills, 821 to 864; hot-strip mills, 768 to 798; and galvanizing and tinning, 868 to 899. Only 10 department groups show an increase in the average days lost for temporary injuries. Notable among these are rod mills, 18 to 37; and electrical departments, 48 to 53. Large decreases were experienced in wire drawing, 48 to 26; cold drawing, 30 to 12; cold reduction, 48 to 33; and axle works, 16 to 3.



Experience of a Select Group of Establishments

Table 4 gives the frequency rates by cause of injury for a select groups of establishments that have consistently carried on a safety program. Compared with the frequency rate of the iron and steel industry of 9.7, this group with a total of 269 million employee-hours has a rate of 4.4, less than one-half the industry rate. If the entire industry had as favorable a rate, there would have been only 3,705 accidents instead of 8,176. This table, as well as the chart above, shows the decided drop in injuries during the period 1913 to 1939 and illustrates what can be done under an organized safety program.

TABLE 4.—Frequency Rates for Disabling Injuries in a Select Group of Iron and Steel Establishments, 1913 to 1939, by Causes of Injuries

Cause of injury	1913	1915	1920	1925	1930	1935	1936	1937	1938	1939
All causes ¹	60.3	41.5	23.1	8.2	7.7	6.3	7.2	6.8	5.7	4.4
Machinery	7.3	4.9	3.4	1.6	1.5	1.7	1.7	1.7	1.6	1.4
Other than cranes	3.8	2.6	1.5	.7	.5	.6	.6	.7	.7	.6
Caught in	2.5	1.7	1.0	.5	.4	.5	.4	.5	.5	.4
Breaking	.1	.1	.1	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Struck by load	1.2	.8	.4	.2	.1	.2	.2	.2	.2	.1
Hoisting apparatus	3.5	2.3	1.9	.9	1.0	1.1	1.1	1.0	.9	.8
Overhead cranes	2.8	2.0	1.5	.7	.7	.7	.8	.8	.6	.6
Locomotive cranes	.3	.2	.2	.1	.2	.3	.2	.2	.3	.2
Other	.4	.1	.2	.1	.1	.1	.1	.1	.1	(²)
Vehicles	2.3	1.6	1.1	.3	.3	.2	.2	.3	.2	.2
Hot substances	5.4	3.7	2.4	.6	.4	.4	.5	.6	.4	.4
Electricity	.5	.2	.3	.1	(²)	.1	(²)	(²)	(²)	(²)
Hot metal	3.6	2.3	1.7	.4	.3	.3	.3	.4	.3	.3
Steam, hot water, etc.	1.3	1.2	.4	.1	.1	.1	.2	.2	.1	.1
Falls of persons	4.5	3.5	2.5	1.1	1.0	1.0	1.0	.8	1.0	.5
From ladders	.3	.1	.1	.1	(²)	.1	.1	(²)	.1	(²)
From scaffolds	.2	.2	.2	.1	.1	.1	.1	.1	.1	(²)
Into openings	.2	.1	.1	(²)	(²)	(²)	.1	(²)	(²)	(²)
Slipping or stumbling	3.8	3.1	2.1	.9	.9	.8	.8	.6	.8	.4
Falling material, not handled by injured	1.2	.7	.2	.1	.1	(²)	.1	(²)	.1	.1
Hand tools and handling of objects	26.7	20.6	10.4	3.4	3.6	2.5	2.8	2.5	1.9	1.5
Objects dropped in handling	11.2	7.6	4.4	1.6	1.9	1.0	1.2	1.1	.7	.7
Caught between material	3.4	2.6	1.3	.4	.7	.4	.4	.4	.4	.3
Hand trucks, etc.	1.9	1.4	.6	.2	.2	.1	.1	.1	.1	(²)
Strain in handling	2.5	2.5	1.1	.3	.2	.3	.4	.3	.3	.2
Objects flying from tools	.2	.1	.1	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Slivers, sharp edges, etc.	3.8	3.8	1.5	.4	.2	.4	.3	.2	.2	.1
Hand tools	3.7	2.6	1.4	.5	.4	.4	.4	.4	.3	.2
Miscellaneous	12.9	6.5	3.1	1.1	.8	.5	.8	.8	.6	.4
Asphyxiation	.3	.1	.1	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Objects flying from material, striking body	.8	.6	.3	.1	(²)	.1	.1	.1	.1	(²)
Objects flying from material, striking eye	2.9	1.7	1.1	.2	.2	.1	.2	.2	.1	.1
Heat	.9	.4	.1	(²)	.1	(²)	(²)	(²)	(²)	(²)
Other	8.0	3.7	1.5	.8	.5	.3	.4	.5	.3	.3

¹ Totals and subtotals are based on employee-hours rather than on totals of rounded individual figures.² Less than 0.05.

AGRICULTURAL WORKERS' HEALTH AND MEDICAL ASSOCIATION, CALIFORNIA

THE influx of migratory workers and their families into Western States, particularly California and Arizona, during recent years has created serious problems of relief for these States. While transience has been a recognized social problem for many years, the operation of the Federal Emergency Relief Administration brought out the nature and extent of the present migratory movement. From September 1933 to September 1935 the FERA gave relief to approximately 200,000 transient families, including about 700,000 persons. An account of the measures taken to meet the medical needs of these migrant families in California, in a recent issue of the Journal of the American Medical Association,¹ contains a summary of existing data on the extent of this migration and the resultant problems.

¹ Medical Care for Migratory Workers. By R. G. Leland, M. D. Journal of the American Medical Association, January 6, 1940 (pp. 45-55). For a discussion of migratory labor in California see Monthly Labor Review, November 1938 (pp. 980-990).

The Federal transient program in California was ended in 1935 and the relief work turned over to the State Relief Administration, which established a policy of denying aid to nonresident applicants who refused to consider returning to their home States. As a result of the inadequate aid given to the migrants, the Farm Security Administration adopted an emergency relief policy, in the winter of 1937-38, of making grants in cash and commodities to them.

Serious illness and malnutrition among the migrants were reported to the regional office of the FSA during that winter, and fear was expressed that epidemics might occur among the migrant agricultural workers. As a result, a plan was drawn up for cooperation with the State Relief Administration for providing assistance to the migrants, but this plan was not successful and the regional office of the FSA then decided to provide medical care as well as food for these transients. It was decided that, because of the difficulties in assuring payment for medical care through the use of grants to individual families who might leave the locality before the grant check was delivered, some method of direct payment was necessary. A plan was decided upon after consultation with the State and Federal public health services and the State Medical Association, which resulted in the establishment of the Agricultural Workers' Health and Medical Association as a corporation. Although the association was incorporated in California, it was given legal authority to do business in other States. This was done for the purpose of allowing the extension of a medical-aid program to Arizona without necessitating the creation of another corporation.

Plan of Medical Organization

The association was incorporated as a nonprofit organization for the mutual benefit and rehabilitation of its members, and was empowered to engage in any activities involved in or related to the provision of medical and dental services, nursing or hospitalization, medical and surgical supplies and appliances, and such other services and supplies as might be necessary, and authorization was given to the association to borrow necessary money or supplies from the FSA or other Federal or State agencies. The bylaws of the association provided that membership should be restricted to low-income farm owners, farm tenants, sharecroppers, farm laborers, drought refugees, or persons who, when last employed, obtained a major portion of their livelihood from agricultural or related operations. A board of directors consisting of seven members was provided for, four of whom should be appointed by the Farm Security Administration, one by the California Department of Public Health, and two by the State Medical Association.

The plan provided that applicants for membership in the association should be referred by representatives of the State department of public health and by local health and relief agencies, and should be interviewed and investigated by medical-social workers, employed by the association, to determine their status as low-income agricultural workers and their inability to obtain medical assistance from county welfare or other agencies, because of residence requirements or lack of funds.

The applicant for membership agrees in his application that he is obligated to repay the association for its expenditures for emergency medical and dental treatment, services, and supplies, for himself and his dependents. The member is referred by the medical-social workers to physicians and dentists in good standing who have agreed to participate in the program. When referred to a physician, the order, signed by the medical-social worker, serves as authorization for 1 visit by the physician, after which the doctor recommends the necessary treatment; and the form filled out by the doctor, when approved by the medical-social worker and signed by the client, serves as an authorization for subsequent treatment not to exceed 10 visits or 2 weeks. The authorized services include drugs and special diet requirements prescribed by the physician, hospitalization, X-ray and laboratory services, and emergency dental extractions and treatment. Medical care may be obtained by members on presentation of their membership certificates at any of the district offices of the association.

Before the program was put into operation all physicians, druggists, and private hospitals were notified of the scope and objectives of the program and were given the schedules of fees which had been adopted. The State was divided into districts, with regional headquarters in Fresno, a district office being established in that city in May 1938. Since that time 10 districts have been opened.

The mobility of the migrant population is such that the personnel of these offices in many instances literally have to follow the crops, but in some counties there has been a continuous need for permanent offices the year round. In September 1938 the program was extended to Arizona and a branch regional office was established at Tempe. Six district offices were opened, which were operated as diagnostic and treatment centers rather than referral offices and were staffed with nurses instead of medical-social workers.

As these centers proved satisfactory, it was decided to convert the referral-type offices in California into the diagnostic and treatment center type. As the FSA had established clinics in four of the labor camps, these clinics and all their equipment were turned over to the association. The association provided the additional equipment as needed and a full supply of drugs to be used and dispensed in the clinics. The nurses in charge do minor dressings, and doctors chosen

by the county medical society serve each morning, taking care of such conditions as can be handled in the clinic. Patients needing service beyond the scope of the clinic are referred to physicians who cooperate in the program.

Results of Operation of the Association

The total expenditure from May 4, 1938, through May 31, 1939, including commitments up to that time, was \$952,598, of which \$754,239 was expended in California and the remainder in Arizona. During that period approximately 900 physicians and 150 dentists served the association in the 2 States and 150 hospitals were used by the association members. Altogether, 880 druggists were on the panel of the association in the 2 States, and drugs were furnished at a price schedule approved by the retail druggists' association.

From May 1938 through July 1939, services were provided by the association to nearly 38,000 migrant workers and their families. Of this number 6,687 were hospitalized.

The service as planned under a medical adviser in the latter part of 1938 provided for care of acute and emergency cases only, but it soon became evident that many chronic diseases which were disabling were creating demands on the program, and it was expanded enough to care for some of these cases and some of the chronic diseases of childhood. As a result the association has rendered a wide variety of services to migrant workers and their families. It is the opinion of persons in touch with the situation that the members of the association are receiving medical care which is in all cases equal, and sometimes superior, to that which they would have been able to secure as private patients.

A changing policy in California from the referral to a clinic basis has resulted from the satisfactory clinic arrangements in Arizona. The county medical societies in the areas in which services to the association's members are required have indicated a preference for clinics instead of referrals to physicians' offices. Good medical care is possible under either clinic or private-office conditions for ambulatory patients, but the clinic as compared with the private-office method offers certain difficulties in the care of those patients who are unable to come to the clinic.

The association has many problems to meet as a result of the wide variation in environmental and domiciliary conditions. Refrigeration is impossible in many instances, and as a result no satisfactory method has yet been found of handling prepared infant-feeding formulas during hot weather. Some families exist near the roadside with only a tattered tent for a shelter, and irrigation ditches may be the only source of water supply. A mobile unit of service facilities, consisting

of an administrative office, a medical office, a power unit for electricity and hot water, a bathhouse, and a supply unit which can be moved to any migrant concentration, is being developed to meet such conditions.

Aside from their strictly medical needs, the migrant population presents a special problem in regard to public health and education. The director of public health in California has made an effort to extend to migrants many of the facilities for health protection which are available to permanent residents of the State, while the State department of education has provided educational facilities that move with the migrant groups as they follow the crops.

In conclusion the writer states: "The officers of the Agricultural Workers Health and Medical Association recognize that the plan adopted for its members is something of an experiment. Many changes have been made in the manual of procedures, and conferences to discuss policies and procedures are held with the professional groups in the several districts. The board of directors and the administrative officers have endeavored to confine their activities to fiscal policies and to place responsibility for the conduct of medical services on the medical and dental professions. A fairly generous amount of funds has been made available by the Farm Security Administration for the association's medical program. Time will demonstrate the practicability of this type of medical relief and the changes that may be needed to maintain and advance the quality of medical and health protection for the migrant group of the general population."



VOLUNTARY MEDICAL SERVICE PLAN IN ONTARIO

A SYSTEM of voluntary contributory health insurance was established in the Province of Ontario in 1937.¹ An organization called Associated Medical Services, Inc., was established and a charter granted by the Ontario Government, the basic idea being to provide medical and hospital service to subscribers without profit. Through a system of monthly payments, any wage earner or salaried person, regardless of income, may obtain medical, surgical, and nursing treatment. The fees amount to \$2 per month for subscribers, \$1.75 per month for the first dependent, \$1.50 for the second, \$1.25 for the third, and \$1 for the fourth and each additional dependent, so that an average family of four may voluntarily provide against the contingency of sickness for \$6.50 a month.

The recent annual report² of the director of the organization shows the progress of the system since it started to operate on May 31,

¹ See Monthly Labor Review, January 1939 (p. 71).

² Labor Gazette, Canada, May 1940 (p. 456).

1937. At the end of 1937 the plan was in operation in only three localities—Toronto, Woodstock, and Norfolk County—and there were 733 subscribers. A branch was opened in Ottawa in April 1938. At the end of that year there were 4,000 subscribers, and at the close of 1939 the number of subscribers had increased to 12,000, new branches having been opened in four other cities. By March 1940 two more branches were functioning and there was a total of 15,000 subscribers.

The majority of physicians in the localities covered by the plan have been glad to cooperate in the service. Those physicians and surgeons who participate in the plan send the bills for their services to the corporation which pays the bills, but in other respects the service rendered is the same as that to any private patient. The benefits include both medical and surgical treatment; hospitalization not to exceed a cost of \$3.50 per day; all necessary nursing; and obstetrical care if both the husband and the wife have been subscribers for at least 10 consecutive months. There is a 2 months' probationary period and no benefits are payable until the subscription has been paid for 3 months. The services are provided through the family doctor specified by the subscriber, but special services such as X-ray, consultations, hospitalization, or special nursing, etc., must be specially authorized.

For the year 1939 the total expenditure amounted to \$109,698, of which \$77,691, or 70.8 percent, was for physicians' or surgeons' fees; \$24,782, or 22.6 percent, for hospitalization; \$6,722, or 6.1 percent, for nursing; and \$502, or 0.5 percent, for drugs. The average medical cost per subscriber by months during the year was as follows: January, \$1.19; February, \$1.67; March, \$1.51; April, \$1.60; May, \$1.64; June, \$1.29; July, \$1.15; August, \$1.31; September, \$1.05; October, \$1.29; November, \$1.63; and December, \$1.36. The reserve on hand as of March 31, 1940, was \$35,118, but it is pointed out in the report that it cannot be regarded as a profit, as it is no more than sufficient for a moderate epidemic, for which specific purpose it is intended.



SAFE CONCENTRATIONS OF CERTAIN COMMON TOXIC SUBSTANCES ¹

FOR some time, Massachusetts has made use of the following figures as a guide to manufacturers and others interested in maintaining satisfactory working conditions. Many of us feel that the codes on toxic limits now being prepared for the American Standards Association will be some time in appearing and we believe that it would help industry if this list were used in the interim.

¹ By Manfred Bowditch, C. K. Drinker, Philip Drinker, H. H. Haggard, and Alice Hamilton, reprinted from the *Journal of Industrial Hygiene and Toxicology*, June 1940, with permission of the publishers, Williams & Wilkins Co., Baltimore, Md.

TABLE 1.—Maximum Concentration Suggested by Massachusetts

Gas or vapor	Parts per million	Gas or vapor	Parts per million
Ammonia.....	100	Hydrogen cyanide.....	20
Amyl acetate.....	400	Hydrogen fluoride.....	3
Aniline.....	5	Hydrogen sulfide.....	20
Arsine.....	1	Lead.....	¹ 0.15
Benzene.....	75	Mercury.....	¹ 0.1
Cadinium.....	¹ 0.1	Methanol.....	200
Butyl acetate.....	400	Monochlorobenzene.....	75
Carbon bisulfide.....	15	Nitrobenzene.....	5
Carbon monoxide.....	100	Nitrogen oxides.....	10
Carbon tetrachloride.....	100	Ozone.....	1
Chlorine.....	1	Phosgene.....	1
Chlorodiphenyls.....	¹ 1	Phosphine.....	2
Chloronaphthalene.....	¹ 1 to 5	Sulfur dioxide.....	10
Chromic acid.....	¹ 0.1	Tetrachlorethane.....	10
Dichlorobenzene.....	75	Tetrachlorethylene.....	200
Dichlorethyl ether.....	15	Toluene.....	200
Ether.....	400	Trichlorethylene.....	200
Ethylene dichloride.....	100	Turpentine.....	200
Formaldehyde.....	20	Xylene, coal tar naphtha.....	200
Gasoline.....	1,000	Zinc oxide fume.....	¹ 15
Hydrochloric acid.....	10		

¹ Milligrams/cu. meter.

It is not implied that observance of these figures is a guaranty against possible ill health of workers exposed, or that medical control can be neglected. Revision of any such table from time to time will always be necessary.

Social Security

PLACEMENT WORK OF PUBLIC EMPLOYMENT SERVICES, JUNE 1940¹

PLACEMENTS in both private and public employment in June 1940 totaled 330,000, a decrease of 5.6 percent from May, which was largely attributable to the fewer number of working days than in May. Public employment offices were instrumental, also, in effecting 142,000 supplemental placements, a gain of 70 percent over May. Applications for work and number of registrants in the active file remained practically unchanged from the previous month.

Jobs filled in private employment totaled more than 288,000, a decline of 5.2 percent from May. More than 49,000 of these jobs were in agricultural employment, reflecting the continuing general demand for farm labor. Although decreases were widespread, the June 1940 volume was 15 percent higher than in June 1939 and 76 percent greater than in June 1938. Reductions of more than 30 percent were shown for Alabama, Kentucky, and Oklahoma, largely attributable to fewer agricultural placements made in these States in June. There were 3 other States in which private placements were at least 20 percent fewer than in May. The outstanding gains among the 14 States reporting increased private placements were in Hawaii, Maine, and Washington. Increasing agricultural placements chiefly accounted for the doubling of placements in Washington, while renewed activity in the resort areas was largely responsible for the increase in Maine. Of the total number of private placements, 134,000 or 46 percent were expected to last a month or longer. Placements in public and governmental work totaled 42,000, a decline of 8.4 percent from May. This volume was approximately half of such placements in June 1939 and June 1938.

Private placements in the first half of 1940 were nearly 28 percent higher than in the corresponding period of 1939. The greatest gains were shown by Hawaii and Washington, where private placements during January-June 1940 were more than double the number of placements made in the first half of 1939. Other States showing notable gains were Arizona, Georgia, Kansas, Kentucky, Massachusetts, Mississippi, Missouri, Montana, New York, Ohio, and South Carolina, where placements increased more than 50 percent. Only 4

¹ Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

States reported filling fewer jobs in private employment during January-June 1940 than in the same period in 1939.

Reflecting the continuing general demand for workers in agriculture, supplemental placements increased nearly 70 percent, to 142,000, the highest volume this year. Jobs filled by this type of placement were 37 percent higher than a year ago. Agricultural placements accounted for 88 percent of all supplemental placements. In addition to Texas, which made 36 percent of all supplemental placements, large numbers of such placements were reported by Arkansas, Missouri, Oregon, and Tennessee.

Applications for work received during June totaled nearly 1½ million, practically unchanged from the previous month. Increased numbers of applications were received by 29 States, the most pronounced expansions occurring in the District of Columbia and the State of Washington.

Job seekers in the active file numbered 5.7 million at the end of June, practically the same volume as last month. Increased numbers of job seekers were reported in 24 States, with only the District of Columbia and Utah showing expansions in excess of 10 percent. Of the 27 States reporting declines, Alaska and Arkansas had decreases in excess of 15 percent. (See table 1.)

More than 11,200 veterans were placed in jobs found by public employment offices in June. Nearly 9,000 of these jobs were in private employment, a decline of 17 percent from May. Applications for work received from veterans declined to approximately 42,000, and the number of veterans registered in the active file were 2.8 percent fewer than at the end of May. (See table 2.)

TABLE 1.—Summary of Placement Activities of Public Employment Services, June 1940

Activity	Number	Percentage change from—		
		May 1940	June 1939	June 1938
Total complete placements.....	329,914	-5.6	-4.0	+33.9
Private.....	288,230	-5.2	+14.7	+76.0
Regular.....	133,831	-1.2	+14.1	+96.0
Temporary.....	154,399	-8.4	+15.2	+61.7
Public.....	41,684	-8.4	-54.8	-49.5
Supplemental placements.....	141,959	+69.8	+36.6	-----
Total applications.....	1,317,775	-.7	+4.3	-3.4
Active file.....	5,737,673	+2	-8.7	-26.7

TABLE 2.—Summary of Placement Activities for Veterans, June 1940

Activity	Number	Percentage change from—		
		May 1940	June 1939	June 1938
Total complete placements.....	11,210	-17.2	-21.9	-17.8
Private.....	8,968	-16.7	+3.7	+23.0
Regular.....	3,139	-9.3	+9.2	+58.9
Temporary.....	5,829	-20.2	+1.0	+9.6
Public.....	2,242	-19.4	-60.7	-64.6
Total applications.....	42,095	-8.4	+3.5	-16.2
Active file.....	239,872	-2.8	-23.1	-45.9

TABLE 3.—Placement Activities for All Registrants, by Regions and States, June 1940
 [Preliminary data reported by State agencies, corrected to July 12, 1940]

Social Security Board region and State	Complete placements						Supplemental placements	Applications received			Active file as of June 30, 1940
	Total	Private				Public		Number	Percent of change from—		
		Number	Percent of change from—		Regular (over 1 month)						
			May 1940	June 1939					May 1940	June 1939	
Total.....	329,914	288,230	-5.2	+14.7	133,831	41,684	141,959	1,317,775	-0.7	+4.3	5,737,673
Region I:											
Connecticut.....	5,769	4,496	-3.7	+6.6	2,451	1,273	157	22,940	+17.8	-5.2	85,335
Maine.....	2,633	2,211	+35.0	-.7	1,804	422	9	10,727	+6.7	+12.3	45,844
Massachusetts.....	3,990	3,353	-4.9	+53.9	2,577	637	81	34,711	-14.1	+12.7	222,216
New Hampshire.....	2,464	2,011	+1.6	+39.2	1,514	453	329	7,652	+6.4	+14.1	24,478
Rhode Island.....	790	731	+7.8	-13.8	446	59	81	7,999	+3.6	-9.3	43,809
Vermont.....	1,136	947	-8.1	+4.2	495	189	9	2,644	+4.7	-23.4	19,366
Region II:											
New York.....	28,110	26,335	-1.1	+36.2	12,532	1,775	732	172,413	-8.3	+10.0	679,728
Region III:											
Delaware.....	1,324	1,122	-18.8	-19.4	440	202	22	2,997	+1.1	-39.9	12,370
New Jersey.....	9,791	9,413	-7.2	-5.3	5,386	378	506	48,510	+1.4	-8.7	264,132
Pennsylvania.....	13,418	10,114	-13.6	+43.0	6,668	3,304	1,460	123,994	-7.3	+9.3	372,175
Region IV:											
Dist. of Columbia.....	4,218	3,635	-17.9	+11.8	1,600	583	0	14,296	+49.0	+45.1	38,681
Maryland.....	4,304	3,811	-13.8	+32.6	2,166	493	11	21,039	-1.4	-26.0	72,511
North Carolina.....	6,042	4,745	-16.8	-2.5	2,239	1,297	2,125	22,567	-10.4	-.1	94,655
Virginia.....	5,921	5,039	-9.9	+34.3	2,388	882	262	18,315	-7.5	-12.4	58,760
West Virginia.....	3,001	2,425	-7.4	+4.5	1,283	576	367	20,262	-11.0	+3.3	86,896
Region V:											
Kentucky.....	3,152	2,393	-38.3	+18.3	924	759	167	15,797	-9.2	-4.0	95,993
Michigan.....	12,185	10,959	-9.4	+3.4	6,267	1,226	131	53,249	+9.7	-2.6	252,172
Ohio.....	16,791	15,720	-10.4	+38.4	7,827	1,071	421	74,669	(1)	+7.8	313,221
Region VI:											
Illinois.....	13,541	13,373	-12.0	+24.1	6,800	168	867	56,550	-2.1	+45.3	193,563
Indiana.....	8,533	8,287	-5.8	+4.7	4,416	246	2,210	41,072	+5.3	+2.1	171,579
Wisconsin.....	7,539	6,854	-2.8	+3.9	4,106	685	439	31,933	+20.4	-5.0	115,747
Region VII:											
Alabama.....	5,278	4,681	-39.5	+25.1	2,211	597	516	18,685	-12.3	+24.2	115,237
Florida.....	2,303	1,744	-20.9	+74.2	978	559	1,137	16,848	+1.0	+9.4	68,932
Georgia.....	7,809	6,818	-17.6	+26.0	2,697	991	222	27,253	-25.2	+24.6	174,209
Mississippi.....	4,025	2,091	-.3	+8.2	939	1,934	272	14,943	-13.3	-19.5	52,033
South Carolina.....	2,716	1,518	-21.8	+35.5	778	1,198	45	8,789	-10.5	-15.8	50,012
Tennessee.....	7,293	6,634	+19.4	+45.5	2,167	659	14,816	15,115	+2.7	+3.1	125,324
Region VIII:											
Iowa.....	7,483	5,142	-16.7	-1.5	1,972	2,341	417	17,918	+19.1	-13.5	81,551
Minnesota.....	6,841	5,985	-8.7	+16.1	3,327	856	379	18,895	+2.1	-3.2	137,803
Nebraska.....	3,468	1,936	+12.2	+32.3	814	1,532	47	11,224	-12.5	+42.4	47,346
North Dakota.....	2,245	1,807	-10.5	+3.7	894	438	37	4,591	+10.9	+6.4	30,232
South Dakota.....	1,452	870	-25.4	-15.5	345	582	27	3,564	+22.7	+12.9	27,199
Region IX:											
Arkansas.....	7,596	7,136	+6.0	+9.7	1,113	460	17,499	13,276	+24.2	+35.5	45,052
Kansas.....	4,598	3,635	-9.3	+52.6	1,274	963	275	15,730	-4.5	+30.0	59,970
Missouri.....	8,645	7,576	-9.6	+48.0	4,144	1,069	9,434	40,271	-15.0	+18.7	187,124
Oklahoma.....	4,588	4,055	-30.5	-16.3	948	533	793	19,057	+11.6	+4.2	86,474
Region X:											
Louisiana.....	2,590	2,435	-18.3	-38.7	1,532	155	509	19,907	+4.4	+2.0	89,037
New Mexico.....	1,371	992	+6.2	-29.7	544	379	1,153	3,867	-1.1	-10.2	35,528
Texas.....	27,573	25,711	-9.7	-5.5	8,334	1,862	50,622	56,503	+15.6	+5.2	256,863
Region XI:											
Arizona.....	2,657	2,350	-12.1	+24.1	624	307	1,320	6,683	+7.7	+18.9	26,064
Colorado.....	6,654	6,359	+26.7	+7.7	1,648	295	1,142	14,798	+2.9	-2.8	59,039
Idaho.....	4,054	3,616	+3.2	+11.3	923	438	2,236	8,691	+28.7	+38.0	14,341
Montana.....	2,275	1,626	-10.4	+104.8	1,112	649	419	4,073	-10.8	-14.8	25,864
Utah.....	2,126	1,836	+15.9	-16.5	300	290	360	8,616	+13.5	-15.2	22,709
Wyoming.....	1,105	527	-29.2	-2.6	208	578	21	3,338	+3.0	-15.0	8,305
Region XII:											
California.....	20,048	17,798	-11.8	-18.5	9,229	2,250	2,144	93,940	+8.0	-16.2	486,309
Nevada.....	1,265	1,063	-1.0	+7.6	595	202	159	2,632	-4.8	-10.0	5,530
Oregon.....	5,888	4,812	+1.1	-15.9	2,614	1,076	24,782	13,778	-11.3	+16.0	40,229
Washington.....	19,658	18,635	+117.8	+131.8	6,768	1,023	644	28,441	+38.0	+48.7	105,375
Territories:											
Alaska.....	710	314	+8.7	+29.2	113	396	45	814	-32.9	-13.4	1,621
Hawaii.....	948	554	+46.9	+130.8	297	394	11	1,199	-21.5	+5.7	9,130

¹ Less than a tenth of 1 percent increase.

TABLE 4.—Placement Activities for Veterans, by Regions and States, June 1940

[Preliminary data reported by State agencies, corrected to July 12, 1940]

Social Security Board region and State	Complete placements					Applications received				Active file as of June 30, 1940
	Total	Private				Pub- lic	Num- ber	Percent of change from—		
		Num- ber	Percent of change from—		Regu- lar (over 1 month)			May 1940 ¹	June 1939 ¹	
			May 1940 ¹	June 1939 ¹						
Total.....	11, 210	8, 968	-16. 7	+3. 7	3, 139	2, 242	42, 095	-8. 4	+3. 5	239, 872
Region I:										
Connecticut.....	253	184	-2. 1	+29. 6	89	69	584	+2. 5	-33. 0	3, 617
Maine.....	94	74		-1. 3	56	20	240	-18. 9	-20. 8	2, 241
Massachusetts.....	85	53	-19. 7		41	32	841	-10. 7	+4. 5	6, 309
New Hampshire.....	98	86	-7. 5		65	12	268	-11. 3	+9. 8	920
Rhode Island.....	22	15			7	7	130	-20. 2	-48. 2	1, 021
Vermont.....	45	34			14	11	54	-32. 5	-32. 5	824
Region II:										
New York.....	654	565	-18. 2	+49. 5	208	89	2, 581	-3. 8	+9. 4	16, 708
Region III:										
Delaware.....	37	26			14	11	103	-1. 9	-34. 8	413
New Jersey.....	184	167	-10. 2	-2. 9	93	17	937	-23. 2	-30. 0	8, 998
Pennsylvania.....	359	238	-6. 7	+51. 6	164	121	4, 402	-12. 7	+27. 3	14, 017
Region IV:										
Dist. of Columbia.....	181	107	-33. 5	-1. 8	32	74	879	+65. 2	+133. 8	2, 303
Maryland.....	180	153	-19. 0	+41. 7	73	27	603	-23. 4	-54. 9	2, 949
North Carolina.....	117	87	-28. 1	-27. 5	17	30	480	-7. 3	-14. 4	2, 087
Virginia.....	117	86	-22. 5	-27. 1	43	31	389	-10. 4	-29. 7	1, 325
West Virginia.....	60	36			20	24	709	-41. 8	+15. 8	4, 391
Region V:										
Kentucky.....	116	78	-44. 3	+11. 4	28	38	499	-18. 9	-10. 9	3, 950
Michigan.....	557	497	-12. 5	+26. 5	230	60	2, 063	-10. 3	0	13, 497
Ohio.....	613	560	-17. 2	+65. 2	181	53	2, 368	-9. 3	-1. 7	12, 382
Region VI:										
Illinois.....	409	368	-25. 8	-6. 8	130	41	2, 189	-24. 5	+66. 5	8, 823
Indiana.....	188	173	-38. 9	-35. 4	69	15	1, 112	-12. 4	-4. 7	8, 686
Wisconsin.....	224	173	+14. 6	-8. 9	114	51	1, 436	+5. 4	-2. 7	7, 011
Region VII:										
Alabama.....	151	129	-27. 5	-9. 8	40	22	539	-18. 2	+27. 4	4, 577
Florida.....	69	53			26	16	576	-5. 7	+1. 8	3, 008
Georgia.....	193	168	-19. 6	+12. 8	62	25	656	-34. 7	+52. 6	4, 723
Mississippi.....	69	19			6	50	416	+27. 6	+26. 8	1, 312
South Carolina.....	69	41			8	28	247	-6. 8	-12. 1	1, 599
Tennessee.....	181	164	-12. 8	+30. 2	47	17	441	+18. 9	-23. 2	4, 844
Region VIII:										
Iowa.....	550	361	-34. 6	-5. 5	65	189	707	+3. 4	-25. 1	4, 854
Minnesota.....	272	225	-22. 1	+77. 2	90	47	542	-23. 7	-8. 8	8, 671
Nebraska.....	154	102	+56. 9	+104. 0	18	52	479	-40. 2	+84. 9	2, 625
North Dakota.....	76	53	-11. 7		21	23	128	-3. 0	+6. 7	1, 290
South Dakota.....	55	19			4	36	108	-9. 2	+14. 9	1, 335
Region IX:										
Arkansas.....	291	265	-1. 5	+19. 9	26	26	404	+29. 9	+22. 1	1, 914
Kansas.....	185	135	-10. 6	+15. 4	18	50	717	-7. 8	+5. 0	3, 713
Missouri.....	405	349	-13. 0	+37. 4	104	56	1, 548	-30. 8	+31. 4	9, 831
Oklahoma.....	195	159	-44. 2	-35. 9	10	36	1, 089	+37. 8	+56. 0	5, 536
Region X:										
Louisiana.....	43	38			23	5	488	-10. 5	-2. 6	2, 629
New Mexico.....	50	28			8	22	163	-14. 2	+21. 6	1, 869
Texas.....	911	805	-18. 6	-19. 3	124	106	1, 269	+10. 5	-3. 3	7, 481
Region XI:										
Arizona.....	120	101	-22. 3	+31. 2	21	19	329	-9. 6	+80. 8	1, 604
Colorado.....	188	168	+9. 1	-22. 6	38	20	657	+1. 1	-2. 2	3, 044
Idaho.....	263	211	+6. 6	-10. 2	46	52	600	+50. 4	+61. 3	851
Montana.....	153	115	-20. 7		80	38	225	-11. 8	-20. 2	1, 416
Utah.....	54	21			3	33	326	-9. 9	-32. 6	1, 215
Wyoming.....	48	14			5	34	134	-18. 3	-38. 8	432
Region XII:										
California.....	1, 048	851	-11. 2	-14. 0	320	197	4, 896	+12. 4	-7. 8	28, 436
Nevada.....	60	51	-33. 8	-30. 1	19	9	141	-2. 1	-15. 6	326
Oregon.....	307	232	-11. 1	-17. 4	107	75	594	-21. 9	+28. 6	2, 605
Washington.....	388	301	+24. 9	+46. 1	98	87	722	+4. 4	+4. 5	5, 118
Territories:										
Alaska.....	32	15			7	17	46			83
Hawaii.....	37	15			7	22	41			459

¹ Where less than 50 veteran placements or applications were involved in either period the percentage change was not computed.

UNEMPLOYMENT-COMPENSATION OPERATIONS, JUNE 1940¹

BENEFIT payments to unemployed workers during June were maintained near the record level of May, largely because of increased disbursements in States which began uniform benefit years in April. Several of these States have uniform duration of at least 13 weeks for each eligible claimant. Claimants received a total of 53.6 million dollars in benefit payments, a reduction of 1.3 million dollars from the preceding month, largely attributable to the smaller number of working days in June. Benefit payments in the first half of 1940 totaled more than 283 million dollars, approximately 25 percent more than disbursements for the corresponding period of 1939.

Continued claim receipts in June totaled 6.5 million, a decline of 10 percent from May. In the 46 States reporting reductions, declines of 30 percent or more occurred in Idaho, Montana, North Dakota, Oregon, and Rhode Island, and in 7 other States receipts were at least 20 percent lower than in May. Claims filed to meet waiting-period requirements of State laws decreased 21 percent, while compensable claim receipts declined only 7 percent.

The number of weeks of unemployment compensated during June exceeded 5.2 million, a decline of 2.7 percent from May. Approximately 4.7 million weeks of total unemployment, 90 percent of all weeks of unemployment, were compensated during the month. Weeks of partial and part-total unemployment compensated decreased slightly to 473,000. Decreases in the number of weeks of unemployment compensated were widespread, increases being reported by only 10 States. The outstanding rises were shown for Michigan, New York, and West Virginia. More than one-fifth of all weeks of unemployment compensated in Delaware, Hawaii, Illinois, Indiana, Kentucky, Missouri, New Hampshire, Oregon, and Wyoming were for partial and part-total unemployment, and both Illinois and Missouri reported considerable increases over May in weeks of partial and part-total unemployment compensated. Approximately 47 percent of all weeks of partial and part-total unemployment compensated were accounted for by California, Illinois, and Ohio.

Payments declined 2.3 percent from May with decreases reported by 40 States. Reductions of more than 30 percent were shown by Idaho and Minnesota; in 11 other States, payments were at least 20 percent lower than in May. Of the 11 States reporting increases, New York showed the largest expansion, with benefit payments 23 percent higher than in May. The 9 States which began uniform benefit years in April accounted for nearly one-half of all payments, the largest proportion in 3 months. Benefit payments in these States increased 9.5 percent in June, whereas a decline of 11.5 percent was shown for the 42 other States.

¹ Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by Regions and States, June 1940

[Preliminary data reported by State agencies, corrected to July 13, 1940]

Social Security Board, region and State	Continued claims			Weeks compensated			
	Number	Type		Number	Type of unemployment		
		Waiting period	Compen- sable		Total	Partial and part- total com- bined ¹	Partial only ¹
Total.....	6,523,733	1,353,694	5,170,039	⁴ 5,223,451	⁵ 4,734,122	⁶ 473,037	-----
Region I:							
Connecticut.....	65,164	15,697	49,467	49,936	41,445	8,491	(⁶)
Maine.....	82,703	22,131	60,572	63,669	57,466	6,203	(⁶)
Massachusetts.....	461,185	76,870	384,315	398,469	398,469	(¹)	(¹)
New Hampshire.....	52,263	18,107	34,156	35,668	27,977	7,691	(⁶)
Rhode Island.....	130,266	15,105	115,161	115,161	94,430	20,731	(⁶)
Vermont.....	10,523	2,757	7,766	8,506	7,273	1,233	1,077
Region II:							
New York.....	1,420,585	277,505	1,143,080	1,182,539	1,182,539	(¹)	(¹)
Region III:							
Delaware.....	9,202	1,417	7,785	7,745	5,896	1,849	1,746
New Jersey.....	219,037	54,460	164,577	167,110	167,110	(¹)	(¹)
Pennsylvania.....	496,265	133,938	362,327	360,915	360,915	(¹)	(¹)
Region IV:							
District of Columbia.....	17,739	3,860	13,879	16,056	15,141	915	(⁶)
Maryland.....	110,939	16,884	94,055	98,915	86,366	12,549	11,377
North Carolina.....	137,994	33,448	104,546	(⁷)	(⁷)	(⁷)	(⁷)
Virginia.....	130,665	20,381	110,284	102,758	92,796	9,962	8,360
West Virginia.....	82,249	14,622	67,627	68,683	68,489	⁸ 194	(⁶)
Region V:							
Kentucky.....	44,697	13,499	31,198	65,770	50,543	15,227	(⁶)
Michigan.....	233,128	45,325	187,803	189,372	179,181	10,191	(⁶)
Ohio.....	341,329	88,180	253,149	⁹ 244,407	202,536	41,871	(⁶)
Region VI:							
Illinois.....	533,426	72,133	461,293	467,460	341,454	126,006	90,978
Indiana.....	118,326	24,040	94,286	94,143	72,391	21,752	(⁶)
Wisconsin.....	46,937	17,401	29,536	30,540	26,302	4,238	2,918
Region VII:							
Alabama.....	88,232	20,416	67,816	66,334	62,190	4,144	2,763
Florida.....	74,374	19,166	55,208	54,102	47,780	6,322	(⁶)
Georgia.....	95,551	24,421	71,130	68,905	62,786	6,119	5,278
Mississippi.....	36,462	6,695	29,857	28,307	27,248	¹ 1,059	(¹)
South Carolina.....	47,863	9,838	38,025	35,695	29,862	5,833	3,192
Tennessee.....	108,685	18,460	90,225	82,602	75,759	6,843	2,317
Region VIII:							
Iowa.....	43,764	11,690	32,074	30,989	25,631	5,358	1,855
Minnesota.....	77,308	8,532	68,776	66,392	61,140	5,252	(⁶)
Nebraska.....	15,184	2,057	13,127	12,550	11,397	1,153	470
North Dakota.....	5,871	695	5,206	5,394	4,942	452	131
South Dakota.....	6,422	1,169	5,253	5,324	4,695	629	(⁶)
Region IX:							
Arkansas.....	61,048	10,304	50,744	50,744	48,004	2,740	292
Kansas.....	24,726	8,437	16,289	17,020	14,711	2,309	1,501
Missouri.....	132,407	50,374	82,033	88,324	62,103	26,221	18,587
Oklahoma.....	38,704	7,620	31,084	30,427	25,724	4,703	855
Region X:							
Louisiana.....	95,563	17,815	77,748	78,631	74,110	4,521	(⁶)
New Mexico.....	12,365	2,144	10,221	9,109	7,916	1,193	872
Texas.....	171,512	81,163	90,349	117,298	100,524	16,774	(⁶)
Region XI:							
Arizona.....	12,759	3,341	9,418	9,472	8,970	502	477
Colorado.....	40,362	4,421	35,941	37,466	31,683	5,783	3,735
Idaho.....	12,941	2,098	10,843	11,649	10,776	873	(⁶)
Montana.....	20,729	2,840	17,889	18,397	18,397	(¹)	(¹)
Utah.....	7,750	980	6,770	6,871	5,516	1,355	759
Wyoming.....	9,175	1,528	7,647	7,733	5,137	2,596	2,203
Region XII:							
California.....	423,746	46,788	376,958	⁴ 417,115	345,165	55,713	(⁶)
Nevada.....	7,029	875	6,154	6,133	5,684	449	1
Oregon.....	28,940	6,298	22,642	25,064	20,023	5,041	3,878
Washington.....	68,130	10,796	57,334	60,750	51,651	9,099	(⁶)
Territories:							
Alaska.....	7,516	4,561	2,955	⁴ 3,441	3,190	196	0
Hawaii.....	3,993	532	3,461	3,391	2,689	702	693

See footnotes at end of table.

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by Regions and States, June 1940—Continued

Social Security Board, region and State	Benefits paid				Month and year benefits first payable	Amount of benefits since first pay- able ²
	Amount ²	Type of unemployment				
		Total	Partial and part- total com- bined ¹	Partial only ¹		
Total.....	\$53,617,656	\$49,873,028	\$3,058,654			\$1,107,652,921
Region I:						
Connecticut.....	450,281	399,411	50,099	(⁹)	January 1938.....	20,718,251
Maine.....	407,028	372,943	32,992	(⁹)	do.....	9,479,776
Massachusetts.....	3,980,878	3,980,878	(¹)	(¹)	do.....	62,551,148
New Hampshire.....	279,556	239,096	40,460	(⁹)	do.....	5,734,713
Rhode Island.....	1,074,975	986,633	88,342	(⁹)	do.....	20,240,746
Vermont.....	68,888	63,271	5,507	\$4,514	do.....	2,017,282
Region II:						
New York.....	13,418,318	13,418,318	(¹)	(¹)	do.....	217,228,090
Region III:						
Delaware.....	66,968	55,286	11,671	11,005	January 1939.....	1,240,585
New Jersey.....	1,578,013	1,578,013	(¹)	(¹)	do.....	24,162,807
Pennsylvania.....	3,912,100	3,912,100	(¹)	(¹)	January 1938.....	152,229,144
Region IV:						
Dist. of Columbia.....	135,272	128,797	5,627	(⁹)	do.....	4,131,951
Maryland.....	826,867	752,687	73,900	66,023	do.....	19,700,176
North Carolina.....	492,143	(⁷)	(⁷)	(⁷)	do.....	14,908,064
Virginia.....	736,438	684,571	51,792	41,842	do.....	13,266,017
West Virginia.....	521,163	519,112	2,051	(⁹)	do.....	18,155,086
Region V:						
Kentucky.....	451,125	382,832	67,955	(⁹)	January 1939.....	7,325,205
Michigan.....	2,228,608	2,174,014	54,594	(⁹)	July 1938.....	88,576,329
Ohio.....	2,258,733	2,058,066	200,667	(⁹)	January 1939.....	38,546,634
Region VI:						
Illinois.....	5,313,989	4,337,720	966,103	648,505	July 1939.....	40,859,247
Indiana.....	897,349	783,697	113,282	(⁹)	April 1938.....	31,958,659
Wisconsin.....	302,798	276,805	25,993	16,364	July 1936.....	17,650,162
Region VII:						
Alabama.....	426,554	404,882	21,332	13,427	January 1938.....	14,822,900
Florida.....	504,909	458,925	45,984	(⁹)	January 1939.....	6,022,961
Georgia.....	423,087	401,210	21,877	18,769	do.....	5,412,192
Mississippi.....	169,100	164,204	4,715	(¹)	April 1938.....	4,056,569
South Carolina.....	225,776	199,794	25,944	13,171	July 1938.....	3,987,328
Tennessee.....	591,434	562,217	29,217	8,628	January 1938.....	13,915,508
Region VIII:						
Iowa.....	264,295	236,404	27,478	7,768	July 1938.....	10,381,255
Minnesota.....	640,706	599,637	41,069	(⁹)	January 1938.....	22,150,124
Nebraska.....	112,171	104,272	7,897	2,905	January 1939.....	2,468,468
North Dakota.....	48,234	44,847	3,387	1,078	do.....	964,672
South Dakota.....	35,670	31,859	3,767	(⁹)	do.....	626,742
Region IX:						
Arkansas.....	337,823	326,634	11,189	1,306	do.....	3,484,503
Kansas.....	148,471	133,693	14,778	9,176	do.....	3,542,751
Missouri.....	694,981	552,841	142,110	105,655	do.....	9,329,807
Oklahoma.....	285,338	255,623	29,715	4,192	December 1938.....	6,449,262
Region X:						
Louisiana.....	576,228	549,118	26,508	(⁹)	January 1938.....	13,171,561
New Mexico.....	79,572	71,216	8,356	5,915	December 1938.....	1,846,446
Texas.....	857,047	777,856	78,848	(⁹)	January 1938.....	25,419,967
Region XI:						
Arizona.....	100,891	97,117	3,774	3,647	do.....	4,123,448
Colorado.....	395,231	343,651	51,176	34,426	January 1939.....	5,961,595
Idaho.....	118,062	111,241	6,803	(⁹)	September 1938.....	4,009,400
Montana.....	192,335	192,335	(¹)	(¹)	July 1939.....	2,955,385
Utah.....	73,771	64,477	9,294	5,218	January 1938.....	4,988,720
Wyoming.....	90,079	65,825	24,254	20,485	January 1939.....	2,018,012

See footnotes at end of table.

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by Regions and States, June 1940—Continued

Social Security Board, region and State	Benefits paid				Month and year benefits first payable	Amount of benefits since first pay- able ¹
	Amount ²	Type of unemployment				
		Total	Partial and part- total com- bined ¹	Partial only ¹		
Region XII:						
California.....	\$5, 682, 481	\$5, 000, 747	506, 352	(*)	January 1938.....	\$97, 355, 603
Nevada.....	78, 550	74, 409	4, 141	7	January 1939.....	1, 488, 682
Oregon.....	286, 986	247, 849	37, 561	\$27, 527	January 1938.....	12, 738, 076
Washington.....	704, 029	629, 316	74, 713	(*)	January 1939.....	12, 181, 818
Territories:						
Alaska.....	47, 468	45, 543	1, 529	0	do.....	633, 681
Hawaii.....	24, 887	21, 036	3, 851	3, 793	do.....	465, 413

¹ Benefits for partial unemployment are not provided by State law in Montana, New Jersey, New York, and Pennsylvania. In Massachusetts and Mississippi provision for such payments is not effective until October 1940. Of these, only Mississippi provides for payments of less than full weekly benefit amount for total unemployment, i. e., part-total unemployment.

² Includes supplemental payments, not classified by type of unemployment.

³ Adjusted to exclude returned and voided benefit checks.

⁴ Includes some weeks not classified by type of unemployment; in Alaska 55 and in California 16,237.

⁵ Excludes North Carolina.

⁶ Data for partial unemployment included with data for part-total unemployment.

⁷ Data not reported.

⁸ Payments for part-total and partial unemployment are made for benefit periods of one quarter. The number of weeks represented by each such payment is determined by dividing the amount paid by the claimant's benefit rate for total unemployment.

⁹ Figures for June exclude 130 payments amounting to \$2,558 arising from recalculation of weekly benefit amounts and 578 payments for 1,611 weeks amounting to \$16,297 for payment of miners' claims resulting from labor dispute in 1939. Both amounts, however, are included in benefits since first payable.

National Income

NATIONAL INCOME, 1929 TO 1939

REVISED and extended estimates of national income show a total of \$69,378,000,000 in 1939 and \$63,610,000,000 in 1938. National income is expressed in terms of the net value of production, and is affected by price changes. Prices were somewhat lower in 1939 than in 1938, and the physical volume of production, therefore, increased somewhat more than national income since it was not adjusted to take account of price changes. The national income in 1939 was somewhat smaller than in 1937, but prices were materially lower in 1939. The actual volume of production of goods and services in 1939 was therefore probably greater than in 1937.¹ (See table 1.)

TABLE 1.—Total National Income, by Industrial Divisions, 1929, 1932-39

[In millions of dollars]

Item	1929	1932	1933	1934 ¹	1935	1936	1937	1938	1939
Total national income.....	82,885	40,074	42,430	50,347	55,870	65,165	71,172	63,610	69,378
Agriculture.....	7,258	2,551	3,419	4,553	5,276	5,970	6,378	5,432	5,635
Mining.....	1,883	524	590	991	1,028	1,290	1,530	1,072	1,232
Electric light and power and gas.....	1,425	1,096	1,026	1,127	1,152	1,233	1,380	1,365	1,384
Manufacturing.....	20,308	6,009	8,162	10,510	12,402	14,978	16,994	12,359	15,425
Contract construction.....	3,670	906	581	735	964	1,570	1,902	1,749	2,148
Transportation.....	7,108	3,622	3,587	3,817	4,133	4,795	5,088	4,261	4,800
Communication.....	1,047	722	640	679	723	770	839	808	863
Trade.....	11,314	5,290	6,031	6,971	7,608	8,516	9,131	8,593	9,135
Finance.....	8,915	4,895	4,318	4,630	5,131	5,749	6,189	5,837	5,983
Government, including work-program wages.....	6,330	6,487	6,563	7,632	7,923	9,446	9,153	9,846	9,884
Government, excluding work-program wages.....	6,330	6,355	5,917	6,202	6,584	7,063	7,370	7,701	8,015
Work-program wages.....		132	646	1,430	1,339	2,383	1,783	2,145	1,869
Service.....	9,615	5,579	5,321	6,181	6,828	7,643	8,477	8,067	8,374
Miscellaneous.....	4,012	2,393	2,192	2,518	2,695	2,897	3,161	3,102	3,319
Social-security contribution of employers.....				3	7	209	950	1,119	1,196

¹ Estimates of dividends and interest and corporate savings for 1934 and for subsequent years are based on a different industrial classification than are the estimates of the items for earlier years because of a change in the Revenue Act of 1934. Special tabulations from the Bureau of Internal Revenue permitted the making of estimates for 1934 on the earlier basis. For specific items in certain industries the variations are substantial, but for total income the changes were small and the 2 estimates were averaged.

It is explained by the National Income Division of the Bureau of Foreign and Domestic Commerce, which made these estimates, that

¹ U. S. Bureau of Foreign and Domestic Commerce. Survey of Current Business, June 1940: National Income at Nearly 70 Billion Dollars in 1939, by Robert R. Nathan. Previous annual reports of income were summarized in earlier numbers of the Monthly Labor Review, the preceding summary being in the September 1939 Review (pp. 631-635). The Bureau of Foreign and Domestic Commerce also makes estimates of monthly income payments and of income payments by States.

the national income is measured by adding together the net value of products of all producing units, including corporations, Government agencies, partnerships, and individual enterprises. Each of these producing units utilizes personal services and capital provided by individuals who contribute to the productive process and share in its output.

Claims on the national income take the form of wages, salaries, interest, dividends, entrepreneurial withdrawals, and net rents and royalties. These distributive shares form the national income paid out. When business enterprises retain undistributed earnings, or positive savings, the total of the distributive shares which form the national income paid out is less than the national income defined as the net value of production. This occurred in 1939. In 1938, on the other hand, the total of the shares distributed, forming the national income paid out, was greater than the national income defined as net value of production. The difference is described as a draft upon net worth, or as "negative savings."

The National Income Division of the Bureau of Foreign and Domestic Commerce makes estimates, not only of the total national income, but also of aggregate claims on the national income or of income paid out. The estimate for 1939 is \$68,600,000,000, in contrast to \$65,007,000,000 in 1938.

The portion of income paid out classified as "compensation of employees," includes work-program pay rolls and a number of items not classified as salaries or wages. When all of these items are included, the aggregate classified as employee compensation in 1939 was \$46,768,000,000, and in 1938, \$44,301,000,000. These aggregates form larger percentages of total income paid out than in 1929. Wages and salaries alone, however, formed materially smaller proportions of total income paid out in both 1938 and 1939 than in 1929. In 1939, wages and salaries combined were 62.8 percent of total income paid out; in 1938, 62.2 percent; and in 1929, 64.9 percent. In selected industries in which the available information makes possible a separation of wages from salaries, wages in 1939 were 17.0 percent of total income paid out; in 1938, 15.7 percent; and in 1929, 18.5 percent.

National income or net value of product is classified by industrial divisions such as manufacturing and agriculture. The commodity-producing industries accounted for more than 80 percent of the decline of income in 1938, and for two-thirds of the recovery in 1939. It is explained that the large rise in 1939 was partly a result of the war situation and of the impetus of anticipated war demand.

Income paid out is classified by type of payment and includes compensation of employees, dividends and interest, entrepreneurial withdrawals, and net rents and royalties. (See table 2.)

TABLE 2.—National Income Paid Out, by Type of Payment, 1929, 1932-39

Item	1929	1932	1933	1934	1935	1936	1937	1938	1939
Amount (in millions of dollars)									
Total income paid out.....	80,611	49,289	45,515	51,788	55,896	64,151	70,262	65,007	68,600
Total compensation of employees.....	52,776	31,516	29,592	34,247	37,239	42,703	47,542	44,301	46,768
Total salaries and wages.....	52,344	30,953	28,531	32,385	35,397	39,498	44,209	40,423	43,076
Salaries (selected industries) ¹	6,153	3,588	3,260	3,760	4,032	4,370	4,881	4,536	4,652
Wages (selected industries) ¹	14,915	6,482	6,786	8,515	9,666	11,166	13,068	10,232	11,630
Salaries and wages (all other industries).....	34,276	20,883	18,485	20,110	21,699	23,962	26,260	25,655	26,794
Total supplements to salaries and wages.....	432	563	1,061	1,862	1,842	3,205	3,333	3,878	3,692
Work-program wages ²		132	646	1,430	1,339	2,383	1,783	2,145	1,869
Social-security contributions of employers.....				3	7	299	950	1,119	1,196
Other labor income.....	432	431	415	429	496	523	600	614	627
Total dividends and interest.....	11,851	8,393	7,351	7,937	8,055	9,721	9,794	8,258	8,956
Dividends.....	5,945	2,727	2,193	2,725	2,931	4,651	4,752	3,370	4,124
Interest.....	5,906	5,666	5,158	5,212	5,124	5,070	5,042	4,888	4,832
Entrepreneurial withdrawals.....	12,620	8,156	7,364	8,149	8,911	9,818	10,813	10,473	10,826
Net rents and royalties.....	3,364	1,224	1,208	1,455	1,691	1,909	2,113	1,975	2,050
Percentages of 1929									
Total income paid out.....	100.0	61.1	56.5	64.2	69.3	79.6	87.2	80.6	85.1
Total compensation of employees.....	100.0	59.7	56.1	64.9	70.6	80.9	90.1	83.9	88.6
Total salaries and wages.....	100.0	59.1	54.5	61.9	67.6	75.5	84.5	77.2	82.3
Salaries (selected industries) ¹	100.0	58.3	53.0	61.1	65.5	71.0	79.3	73.7	75.6
Wages (selected industries) ¹	100.0	43.5	45.5	57.1	64.8	74.9	87.6	68.6	78.0
Salaries and wages (all other industries).....	100.0	66.8	59.1	64.3	69.4	76.6	84.0	82.0	85.7
Total supplements to salaries and wages.....	100.0	130.3	245.6	431.0	426.4	741.9	771.5	897.7	854.6
Work-program wages ²									
Social security contributions of employers.....									
Other labor income.....	100.0	99.8	96.1	99.3	114.8	121.1	138.9	142.1	145.1
Total dividends and interest.....	100.0	70.8	62.0	67.0	68.0	82.0	82.6	69.7	75.6
Dividends.....	100.0	45.9	36.9	45.8	49.3	78.2	79.9	56.7	69.4
Interest.....	100.0	95.9	87.3	88.2	86.8	85.8	85.4	82.8	81.8
Entrepreneurial withdrawals.....	100.0	64.6	58.4	64.6	70.6	77.8	85.7	83.0	85.8
Net rents and royalties.....	100.0	36.4	35.9	43.3	50.3	56.7	62.8	58.7	60.9
Bureau of Labor Statistics cost of-living index.....	100.0	80.2	76.2	79.1	81.1	82.1	84.7	83.4	82.6

¹ Includes mining, manufacturing, steam railroads, Pullman, railway express, and water transportation.

² Includes pay rolls and maintenance of Civilian Conservation Corps enrollees and pay rolls of Civil Works Administration, Federal Emergency Relief Administration, and the Federal Works Program projects plus administrative pay rolls outside of Washington, D. C., for all except the Federal Works Program. Area Statistical Office employees and their pay rolls under the Federal Works Program are included with the regular Federal Government employment and pay-roll figures.

In the industries reporting wages as a separate item, wage payments in 1939 were 22.0 percent below the level of 1929. The total of all forms of income paid out in 1939 was only 14.9 percent less than in 1929. The cost-of-living index was 19 percent lower than in 1929.² Estimated wages and salaries combined, in all industries, were 17.7 percent lower than in 1929. In contrast, the payments that are described as "total supplements to salaries and wages" were only \$432,000,000 in 1929 and \$3,692,000,000 in 1939, or more than 8 times as large as in

² This percentage is derived from the revised cost-of-living index. See Monthly Labor Review, July 1939 (p. 139).

1929. Items included in this aggregate are work-program pay rolls, social-security contributions of employers, and "other labor income." A significant part of these various items, and particularly of the work-program pay rolls, went to farmers, members of professions, and young persons not normally in the wage-earning and salaried groups. There was thus an expansion of payments classified as employee compensation which was not a part of the normal distribution of income either as wages or as salaries.

The National Income Division of the Bureau of Foreign and Domestic Commerce also makes estimates of the number of employees and of their average income. The estimated number of employees is the average for the year and is adjusted in some degree to approximate the full-time equivalent number employed. The average compensation is therefore presented as approximately the per capita compensation of full-time employees. (See table 3.)

TABLE 3.—Number and Per Capita Income of Employees, ¹1929, 1932–39

Item	1929	1932	1933	1934	1935	1936	1937	1938	1939
Number of employees (thousands)									
All employees ²	35,563	26,222	26,133	28,402	29,725	31,858	33,768	31,239	32,419
Salaried employees (selected industries) ²	2,478	1,693	1,634	1,831	1,922	2,068	2,206	2,064	2,100
Wage earners (selected industries) ²	10,964	6,877	7,430	8,553	9,021	9,765	10,618	8,832	9,404
Salaried employees or wage earners (all other industries).....	12,121	17,652	17,069	18,018	18,782	20,025	20,944	20,343	20,915
Per capita of income of employees									
All employees ²	\$1,472	\$1,180	\$1,092	\$1,140	\$1,191	\$1,240	\$1,309	\$1,294	\$1,329
Salaried employees (selected industries) ²	2,483	2,119	1,995	2,054	2,098	2,113	2,213	2,198	2,215
Wage earners (selected industries) ²	1,360	943	913	996	1,071	1,143	1,231	1,159	1,237
Salaried employees or wage earners (all other industries).....	1,414	1,183	1,083	1,116	1,155	1,197	1,254	1,261	1,281

¹ The estimates of the number employed are averages for the year and represent full-time-equivalent numbers for industries in which data permit such adjustments.

² Does not include employers and self-employed persons, such as farmers, merchants, independent professional practitioners, etc., nor work-project employees and unpaid family farm labor.

³ Includes mining, manufacturing, steam railroads, Pullman, railway express, and water transportation.

In 1939 the average number of employees (in the sense of persons working for wages or salaries) was 32,419,000 and the number in 1938 was 31,239,000. The average compensation in 1939 was \$1,329, and in 1938, \$1,294. The average compensation of wage earners in mining, manufacturing, steam railroads, and Pullman, railway express, and water transportation was \$1,237, and the average salary in these same industries was \$2,215. The averages in 1939 were below those in 1929 in terms of money wages or salaries, but were materially higher than in 1929 when the reduction in cost of living is considered.

Negro in Industry

NEGRO YOUTH IN DEPRESSION YEARS

THE unfavorable position of Negro youth, as indicated in recent surveys, analyses of relief rolls, and studies of educational opportunities, has emphasized the need for further consideration of the various problems of this particular group of the population. A report, which brings together much of the available data concerning Negro youth in the United States, has been prepared for the American Youth Commission.¹ This will be followed in the course of a few months by reports on other research projects planned to go deeper into "the significance of what it means to be born a member of America's largest racial minority."

Among the data presented in the preliminary report are those given below.

According to the Federal unemployment census of November 1937, 18 percent of all colored youth² in the 15 to 24 age group, and 31 percent of all colored young people in the labor market were wholly unemployed. An additional 2.2 percent of all colored young persons—or 3.8 percent of all colored young people in the labor market—were on emergency work, making about 20 percent of all colored young people—or approximately 34 percent of all of them in the labor market—who were entirely jobless or engaged only on emergency work.

Nine percent of all colored young persons or 16 percent of those in the labor market were on part-time work in regular employment; of these, approximately 86 percent desired more work and consequently may be regarded as partly unemployed.

Thus unemployment among colored youth, counting those who were wholly unemployed, partly unemployed, and employed only on emergency work, amounted to 29 percent of all colored youth, or 50 percent of all colored youth in the labor market. The corresponding figures for white youth between 15 and 24 years are 24 and 44 percent.

Twenty-eight percent of all colored youth, or 48 percent of those in the labor market, were working full time in regular employment.

Thus, 37 percent of all colored youth, or 64 percent of those on the labor market, were working either full or part time in regular employment; and counting in emergency employment there were 40 percent of all colored youth and 68 percent of those on the labor market who had some kind of employment.

¹ In a Minor Key—Negro Youth in Story and Fact. By Ira DeA. Reid. Washington, American Council of Education, 1940.

² Includes a small percentage of young persons who were not Negroes.

Almost 2 percent of colored youth on the labor market were ill or voluntarily idle.

Median weekly wages of 1,029 employed Negro youth in Maryland were \$7.98, as compared with \$14.33 for 4,474 young white persons, according to the findings of the 1936-37 survey in that State made by the American Youth Commission. Slightly over four-fifths of the young Negroes worked over 30 hours in the week previous to the interview and averaged \$8.88, while 87 percent of the young white workers averaged \$15.48.

About 60 percent of the Negro youth on full time were paid less than \$10 per week. Only 22 percent of the white youth were in this wage group.

The Maryland male Negro youth worked on an average 49 hours per week and received \$8.71. The corresponding figures for 2,826 young white males were 44 hours and \$15.17.

The average wages for 329 young Negro females were \$6.35 for 44 hours and for 1,648 young white females, \$13.20 for 41 hours. These are median values and cover all out-of-school employed youth.

The Maryland youth survey, however, disclosed that for farm young people, the Negro males with jobs were paid on an average almost as much in cash wages as the white males, the former averaging \$8.06 and the latter, \$8.94.

The wage differences were not large except for the older age group, 22 to 24. Negro farm youth 16 to 18 years of age average \$5.69 a week; white farm youth of the same ages, 19 cents more a week. Negro farm youth 19 to 21 received \$8.26 a week, while white farm youth of the same ages received \$3.20 more than the Negro youth.

The wage situation was strikingly different for the farm female youth, the white girls averaging at every age slightly more than twice that of the Negro girls. For ages 16 to 24 the former received \$10.80 a week, the latter, \$4.71.

Wage differences both between the races and between the sexes were for the most part occupational. Young males, both Negro and white, were to a large extent working on farms, in fisheries, etc., which paid low wages that apparently differed very little between the two races. White girls who lived on farms, if employed at remunerative work, had jobs as town or city teachers, stenographers, or clerks, and consequently tended to receive higher compensation. Young Negro females on the farm were engaged largely in domestic service with the low pay usually received for such service.

In Birmingham, Ala., one of the seven large cities covered by the WPA survey of urban youth in the labor market in 1938, the average weekly wage of a sample of selected Negro young people was \$7.91 and that of white youth similarly selected, \$16.14. Almost one-third (31 percent) of the Negro young people in the labor market were currently jobless, while the corresponding percentage for white youth

was 22. Only 11 percent of the Negro young people had been continuously in private employment for 15 hours or over per week, as compared with 31 percent of the white youth.

Relief

While colored youth numbered 128 per 1,000 in the total youth population of the United States, (1930 Census) there were 153 colored youth per thousand in the youth population on relief in May 1935. In the judgment of the author of the report, if relief were administered more consistently on the basis of need in the South, it would be logical to conclude that the relief ratio of young Negroes would be much greater.

From April 1933 to July 1939, about 200,000 young colored males served in the CCC. For the year ended June 30, 1939, these youth contributed approximately \$600,000 per month from their CCC pay to the incomes of their families.

Of 54,480 transients in the 16 to 24 age group who were aided in May 1935, 4,900 were Negroes. Only 31 percent of the young Negro transients had schooling beyond the eighth grade, as compared with 52 percent of the white transient youth.

Of the 36,000 Negro students aided by NYA in 1938, one-fourth were from families in which the parent or guardian was either wholly unemployed or engaged on a WPA project. The average annual family income of these Negro NYA students was \$623 as compared with \$1,163 for all NYA students.

Education

In 1936 the President's Advisory Committee on Education reported on Negro educational problems as follows:

In most of the States where there are separate schools for Negroes, the schools for white children are below the national average, yet Negro schools are only about half as well supported as white schools. Because of the intimate economic relations that necessarily exist between the two races, the low level of education among Negroes is a severe burden not only on themselves but on all who must employ them or have dealings with them. Even in northern States, the large influx of Negroes from the South makes the quality of their previous training a matter of vital importance to the localities where they live and work.

In 1936 the average school year for Negro children was 146 days or 84 percent of the average for the country as a whole and 87 percent of the average for the white children in the South.

There were 2,350 public high schools for Negroes in 1936, but "less than 1 in 5 is a standard and accredited institution." In 200 Southern counties having substantial numbers of Negroes in their respective populations, no 4-year high schools are operating.

At least 900,000 Negroes of high-school age are not attending school, according to estimates of the United States office of Education.

The NYA assistance to students in 113 Negro colleges totaled \$520,420 in the scholastic year 1937-38. In November 1938, the number of students so aided was 36,000. For the year ending June 30, 1939, through the NYA program, 63,000 Negro young people in the 16 to 24 age group were receiving general education, practical training, guidance, work experience, healthful recreation, and over \$500,000 per month as direct work-aid benefits.

Labor Laws and Court Decisions

LABOR DECISIONS OF THE SUPREME COURT, 1939-40

THE October 1939 term of the United States Supreme Court ended on June 3, 1940. During this period the Court handed down a number of important decisions affecting labor. In most cases the decisions were favorable to labor, and those involving the National Labor Relations Act generally upheld the rulings of the National Labor Relations Board. Near the end of the Court's term the now famous Apex case, involving the question of the application of the Sherman Antitrust Act to labor unions, was decided. This statute was held applicable to labor unions only in cases involving combinations and conspiracies entered into for the purpose of interfering with commercial competition. In two other opinions the Court held that picketing and the distribution of leaflets were protected by the constitutional guaranties of freedom of speech and of the press. In those cases involving the National Labor Relations Act, the Supreme Court decided questions relative to the jurisdiction of the National Labor Relations Board, and the power of the courts to review decisions of the Board, and also construed the unfair-labor-practice provisions.

In addition to the written opinions summarized below, the Supreme Court, by denying a review of other cases, thereby upheld several rulings of lower courts affecting labor. The Court thus held that back-pay orders of the National Labor Relations Board are not repugnant to the Constitution; that in cases of violence of a minor nature the Board was within its rights to require that the employees be reinstated; and that an employer is entitled to an injunction against all picketing when the picket signs are libelous. In memorandum opinions, the Court upheld the validity of the collective-bargaining provisions of the Railway Labor Act and affirmed a lower court decision liberally construing the term "labor dispute" under the provisions of the Norris-LaGuardia Act. Further, the Court held in an unwritten opinion that the Railway Labor Act was applicable to an electric railway company.

Labor Relations Cases

In three decisions handed down on January 2, 1940, the Supreme Court considered the question of judicial review of National Labor

Relations Board orders. In these cases the Court defined the limits beyond which the courts cannot go in reviewing actions of the National Labor Relations Board. The Court in general held that the National Labor Relations Act does not provide for judicial review of the procedures and orders of the Board in cases pertaining to employee elections and certifications of unions. In substance, the Court said that the Labor Board has the final decision with regard to defining the appropriate unit, the names of unions which are to be placed on the ballot, and the election procedure to be followed. The right of judicial review was held to be limited to cases involving unfair labor practices and to instances where the employer refuses to take some action predicated upon the results of an election. More specifically the Court in these cases had occasion to consider the following points.

One case¹ involved the Board's designation of the Congress of Industrial Organizations as the representative of about 13,000 longshoremen. The American Federation of Labor complained that its units operating in this field were denied certain rights guaranteed by the act. The Court agreed that the action of the Board had the effect of depriving employees of some companies "of opportunity to secure bargaining representatives of their own choice." However, by examining the act and its legislative history, the Court concluded that Congress did not intend to permit court interference with employee elections conducted by the Board.

The second case² concerned a run-off election in a representation proceeding. The Supreme Court upheld the order of the Board in this case on the same ground as set forth in the longshoremen's case, stating that the direction of an election is no more subject to review than a certification, which is the final step in the proceeding, and which Congress had excluded from review.

In the third case³ the Court held that the power to determine by what method employees shall choose their collective-bargaining representatives is vested in the Board and not in the courts. In a consolidated unfair-labor-practice and representation case, the Board had excluded from participation in an employee election a company-dominated union, but included two outside unions of rival affiliation. It was held in this case that a reviewing court was not authorized to require that the independent union be given a place on the ballot.

On February 12, 1940, the Court again upheld the National Labor Relations Board by ruling that the Board had "exclusive power" to make findings of fact from the evidence in a case and that the courts have authority only to review questions of law.⁴ In this decision the Supreme Court declared that the courts have no authority to substi-

¹ *American Federation of Labor v. National Labor Relations Board*, 60 Sup. Ct. 300.

² *National Labor Relations Board v. International Brotherhood of Electrical Workers*, 60 Sup. Ct. 306.

³ *National Labor Relations Board v. Falk Corporation*, 60 Sup. Ct. 307.

⁴ *National Labor Relations Board v. Waterman Steamship Corp.*, 60 Sup. Ct. 493.

tute their judgment of the facts for that of the National Labor Relations Board, and further declared that the lower court had unwarrantedly interfered with the exclusive jurisdiction granted to the Board by Congress. The opinion emphasized the fact that the courts must not encroach upon the fact-finding powers which Congress as a matter of policy has entrusted to the National Labor Relations Board.

In a later decision involving procedure the Court held that only the National Labor Relations Board, and not a labor union, was authorized to institute proceedings to enforce orders of the Board.⁵ The Court in this case ruled that the Amalgamated Utility Workers could not bring an action in the Circuit Court of Appeals to have the Consolidated Edison Co. held in contempt for failure to comply with certain requirements of the decree of that court enforcing an order of the National Labor Relations Board. In holding that the Board has "exclusive authority" to institute proceedings for the enforcement of its orders, the Court declared that the provision of the act conferring exclusive power upon the Board to prevent any unfair labor practice "necessarily embraces exclusive authority to institute proceedings for the violation of the court's decree directing enforcement."

Again, on a question of procedure under the Labor Relations Act, the Supreme Court ruled that individual employment contracts which restrict the rights of collective bargaining may be held invalid by the Board.⁶ The National Licorice Co. had entered into the contracts with its employees through a collective-bargaining committee which the Board found to be company dominated. Under the contracts each employee agreed not to demand a closed shop nor require any signed agreement by the employer with a union. The order of the Board directed the company to post notices announcing that the contracts were void and hence of no effect. The Court held that such notices should state that the employer would henceforth cease from entering into or enforcing such contracts, but that employees might advance any legal rights acquired under existing contracts.

The decision was based on the ground that the provisions of each contract prevented the employee from bargaining for a closed shop or a signed agreement with the employer, and that the agreement was in plain conflict with the public policy of the act to encourage the procedure of collective bargaining, as it discriminated against labor organizations by forbidding signed contracts with labor unions, while it permitted them with the individual workers.

The matter of jurisdiction of the National Labor Relations Board was considered by the Court in one case. The authority of the Board was held to extend to a processor of goods which are shipped to and

⁵ *Amalgamated Utility Workers v. Consolidated Edison Co. of New York*, 60 Sup. Ct. 561.

⁶ *National Licorice Co. v. National Labor Relations Board*, 60 Sup. Ct. 569.

from the employer's plant by the owner of such goods.⁷ The Court declared that "the act is applicable to a processor who constitutes even a relatively small percentage of his industry's capacity, where the materials processed are moved to and from the processor by their owners through the channels of interstate commerce." Since the purpose of the act was to protect and foster interstate commerce, the Court declared that the Board's jurisdiction could attach, as in this case, before any actual industrial strife materialized to obstruct interstate commerce.

Again the Court upheld a ruling of the National Labor Relations Board⁸ directing the disestablishment of a so-called company union which had been dominated by the employer for a period of 10 years. The Board had declared that where an organization had functioned for a period of 10 years with joint control in the employer and employees, the effects of the plan could not be eliminated and the employees freed from domination, "without the complete disestablishment of the plan." The Supreme Court pointed out that the National Labor Relations Act provides that employee organizations shall be free from any interference by the employer, and declared that in the application of the act it was immaterial that the plan of the employer had not been the cause of any serious labor disputes.

Cases Involving Picketing, Etc.

Several cases involving picketing and allied subjects were considered. In two cases the Supreme Court said that "in the circumstances of our times the dissemination of information concerning the facts of a labor dispute must be regarded as within that area of free discussion that is guaranteed by the Constitution."

An Alabama antipicketing statute and a similar ordinance of Shasta County, Calif., were held invalid. The two decisions, rendered on April 22, 1940, were based on the ground that the prohibition of peaceful picketing violated the fourteenth amendment to the Constitution, which guarantees free speech and a free press.

The Alabama statute prohibited picketing for the purpose of interfering with any lawful business and outlawed loitering without a just cause or legal excuse. In this case⁹ the Court held that the State statute abridged the rights of free speech and free press, and declared that "the safeguarding of these rights to the ends that men may speak as they think on matters vital to them and that falsehoods may be exposed through the processes of education and discussion is essential to free government." The Court also held that the statute could not be sustained as an exercise of the State's police power to

⁷ *National Labor Relations Board v. Bradford Dyeing Association*, 60 Sup. Ct. 918.

⁸ *National Labor Relations Board v. Newport News Shipbuilding & Drydock Co.*, 60 Sup. Ct. 203.

⁹ *Thornhill v. State of Alabama*, 60 Sup. Ct. 736.

preserve the peace and to protect the privacy, the lives, and the property of its residents. The California case¹⁰ involved an ordinance of Shasta County which made it unlawful to engage in picketing or to carry or display a banner in the vicinity of any place of business for the purpose of inducing any person to refrain from purchasing merchandise or performing labor. As in the Alabama case, the Supreme Court based its decision on the ground that the ordinance abridged the constitutional guaranties of free speech and a free press. In this case the Court pointed out that "the sweeping and inexact terms of the ordinance disclose the threat to freedom of speech inherent in its existence." The carrying of signs and banners, no less than the raising of a flag, was held to be a natural and appropriate means of conveying information on matters of public concern.

Sometime before these cases were decided, the Court had announced a principle in relation to the distribution of pamphlets, etc., in public places. Municipal ordinances of Los Angeles, Milwaukee, and Worcester, Mass., which prohibited the distribution of handbills, had been held unconstitutional by the Supreme Court. Similarly, the Court had declared invalid an ordinance of Irvington, N. J., which required a person to obtain a permit before canvassing or distributing circulars.¹¹ The Court held that the ordinances referred to in these cases violated the rights of freedom of speech and of the press guaranteed by the Constitution. While the Court recognized the fact that a municipality may enact regulations in the interest of public safety and welfare, it declared that these regulations must not abridge the individual liberty of those persons who may desire "to speak, write, print, or circulate information or opinion." In connection with the Irvington case, the Court declared that pamphlets distributed from house to house have proved to be "most effective instruments in the dissemination of opinion" and "to require a censorship through license which makes impossible the free and unhampered distribution of pamphlets strikes at the very heart of the constitutional guaranties."

Sit-Down Strike Case

From labor's standpoint perhaps the most important case decided by the Supreme Court was the one involving the application of the Sherman Antitrust Law. This act was held not to apply to a sit-down strike in a factory in which materials imported from other States were used and in which goods were manufactured for interstate shipment.¹² However, the contention of labor that it was

¹⁰ *Carlson v. People of State of California*, 60 Sup. Ct. 746.

¹¹ *Schneider v. State of New Jersey*; *Young v. People of the State of California*; *Snyder v. City of Milwaukee*; *Nichols v. Commonwealth of Massachusetts*, 60 Sup. Ct. 146.

¹² *Apex Hosiery Co. v. Leader*, 60 Sup. Ct. 982.

wholly excluded from prosecution under this act was denied, and the Court ruled that the words of the antitrust act do embrace, to some extent and in some circumstances, labor unions and their activities.

The Court upheld a ruling of the United States Circuit Court of Appeals for the Third Circuit which set aside a judgment of a lower court requiring a union to pay treble damages of more than \$700,000 because of injury to property and loss of business during a sit-down strike. The Court declared that restraint of interstate commerce which is effected by the seizure of a factory by sit-down strikers and their interference with the interstate movements of its products is not the type of restraint contemplated by the act. The statute was held to be applicable only to combinations and conspiracies entered into for the purpose of interfering with free competition in business and commercial activities tending to restrict production, raise prices, and otherwise control the market to the detriment of purchasers or consumers.

Wage and Hour Cases

The wage requirements imposed by the Secretary of Labor on companies doing business with the Government under the provisions of the public-contracts law (Walsh-Healey Act) were held not subject to judicial review by the Supreme Court.¹³

In January 1939, the Labor Department under the Public Contracts Act established six prevailing-wage areas, or localities, effective as of March 1, 1939, for the iron and steel industry. One of the "localities" in the Northeastern section included approximately 14 States and the District of Columbia. Several independent steel companies which were prospective bidders on Government contracts filed an action attacking the order of the Secretary of Labor and complained against the extent of the "locality." They claimed that the interpretation of the word "locality" embraced such a wide area that it was arbitrary and capricious, and therefore would prevent them from competing with larger steel companies. It was their contention that a "locality" meant a local center of manufacture or a small geographical area surrounding the place of performance of the contract.

The Supreme Court, however, agreed with the Government and decided that, in order for the steel companies to have a standing in court, they would have to show an injury or threat to a particular right of their own as distinct from the public interest in the administration of the Walsh-Healey Act. The Court said the law "was not enacted for the protection of sellers and confers no enforceable rights upon prospective bidders." This decision also pointed out that the Government, like private individuals and businesses, enjoys the

¹³ *Perkins v. Lukens Steel Co.*, 60 Sup. Ct. 809.

unrestricted power to produce its own supplies, to determine those with whom it will deal, and to fix the terms and conditions upon which it will make needed purchases.

In another case, by a 5 to 4 decision, the United States Supreme Court held that the Interstate Commerce Commission did not have jurisdiction over the hours of employment of nonoperating employees of truck and bus companies engaged in interstate commerce.¹⁴ Instead, such employees now come under the Fair Labor Standards Act of 1938, administered by the Wage and Hour Division of the United States Department of Labor.

The Federal Wage and Hour Law, adopted in 1938, exempted employees under the jurisdiction of the Interstate Commerce Commission from the maximum hour and overtime provisions of the act, while the Motor Carriers Act of 1935 vested in the Interstate Commerce Commission the power to establish reasonable requirements with respect to "qualifications and maximum hours of service" of common and contract carriers by motor vehicle. The Commission construed this to apply only to drivers and others whose work affected the safety of truck and bus operations. The Supreme Court agreed with the ruling of the Commission, holding that the meaning of "employees" as used in the Motor Carriers' Act "is limited to those employees whose activities affect the safety of operation" and declared that "the Commission has no jurisdiction to regulate the qualifications and hours of any others."

Cases on Safety, Health, Etc.

A Pennsylvania law regulating the operation of motor vehicles which are used to carry other vehicles has been upheld by the United States Supreme Court.¹⁵ The State act was a safety measure that prohibited the operation on the highways of the State of any vehicles carrying any other vehicle over the head of the operator.

It was contended that the statute was invalid because it had been superseded by action of the Interstate Commerce Commission under the Motor Carriers Act of 1935. The Court ruled, however, that the provisions of the Federal act authorizing the Interstate Commerce Commission to investigate and report on the need for Federal regulation of the sizes and weight of motor vehicles leaves undisturbed the power of the States to regulate the size and weight of loaded motor vehicles. The Court further held that the act was "an exercise of the State's power to protect the safe and convenient use of its highways through the control of size and weight of motor vehicles passing over them," and did not violate the due-process clause of the four-

¹⁴ *United States v. American Trucking Associations*, 60 Sup. Ct. 1059.

¹⁵ *Maurer v. Hamilton*, 60 Sup. Ct. 726.

teenth amendment or infringe the commerce clause of the Federal Constitution.

In another decision the Supreme Court upheld a 1939 amendment to the bankruptcy act which gives priority in pending equity receiverships to claims against railroads for personal injuries to employees.¹⁶ The statute requires such claims to be preferred and paid out of the assets of railroad corporations as operating expenses. The Court declared that the 1939 amendment was within the power of Congress to enact, since classification of claims entitled to priority may be the subject of determination by Congress in providing for the distribution of assets in both bankruptcy and equity cases.

Several opinions were rendered by the Court concerning workmen's compensation and allied subjects. In a case involving the payment of compensation under the Federal Longshoremen's and Harbor Workers' Compensation Act, the Supreme Court held that the question as to whether the deceased person had been a member of the crew was a question of fact and not of law.¹⁷ The Court held that the evidence supported the finding of a deputy commissioner that a person who was drowned while employed on a vessel in navigable waters was performing services as a laborer and not as a "member of the crew" within the meaning of the exemption clause of the Longshoremen's and Harbor Workers' Compensation Act. The award of compensation to his widow was therefore sustained by the high court.

In another case a private act of Congress directing the Employees' Compensation Commission to review its order terminating compensation of an employee was held by the Supreme Court not to violate the due-process clause of the Constitution.¹⁸ In this case the time for review of the final award had expired, and Congress enacted a private act in order to cure a fault of administration developed in the handling of a compensable claim. In this connection the Court also ruled that the private act was not an exercise by Congress of a judicial function, in view of the purpose for which it was enacted.

The Court also had occasion during the year to determine a case involving the workmen's compensation law of Puerto Rico (*Bonet v. Texas Co.*, 308 U. S. 463). In this case an action had been brought to enjoin the enforcement of an order awarding compensation for the death of three workmen. The Puerto Rico Supreme Court held that no attack could be made on the order of the commission and affirmed a judgment dismissing the action. The Circuit Court of Appeals, on the other hand, vacated the judgment. The United States Supreme Court affirmed the Puerto Rican court on the ground that lower courts

¹⁶ *Carpenter v. Wabash Railway Co.*, 60 Sup. Ct. 416.

¹⁷ *South Chicago Coal & Dock Co. v. Bassett*, 60 Sup. Ct. 544.

¹⁸ *Paramino Lumber Co. v. Marshall*, 60 Sup. Ct. 600.

must not be overruled on their construction of local statutes in the absence of a clear and manifest error.

A New York State labor law was upheld which protected workers engaged in the construction of buildings or demolition work.¹⁹ While engaged in the construction of a Federal post-office building, an employee of a rigging company, a subcontractor, fell from an unplanked tier of steel beams and was killed. A State court in New York awarded damages for the death of the workman. The Supreme Court agreed with the State court's assumption that Federal sovereignty in this case was complete through consent by the State. The question, however, arose as to whether the acceptance of sovereignty by the United States had the effect of displacing a building regulation of the New York labor law. The Supreme Court thought it did not, and that the particular law continued as a part of the laws of the Federal Territory and is effective "until such time as the Congress may otherwise provide."

In another case indirectly related to workmen's compensation, the Supreme Court upheld the validity of the resident insurance agent law of Virginia.²⁰ This statute provides that all casualty insurance contracts must be made through registered resident agents, who may not pay more than one-half of the customary commission to licensed nonresident brokers. The decision affirmed a ruling of a three-judge Federal court, which decided that the statute was a valid exercise of the powers of the State.

Before the Supreme Court adjourned for the summer recess, it consented to review a number of lower court decisions at the term beginning next October. Among the cases to be heard are several involving the National Labor Relations Act, the question of the right to picket, and other similar cases. The Court may also consent to hear an interesting case brought by the State of Pennsylvania, involving an alien-registration law. The State attorney general has indicated that he will submit the case to the United States Supreme Court, despite the recent enactment of Federal regulations requiring the registering and fingerprinting of aliens.

The alien-registration law of Pennsylvania (Acts of 1939, No. 304) required the listing of certain aliens with the State department of labor.²¹ The law was declared unconstitutional by the United States District Court of Pennsylvania in the case of *Davidowitz v. Hines* (30 F. Supp. 470) on the ground that the legislation encroached upon a field reserved to the Federal Government.²²

The first case involving the Federal wage and hour law to reach the Supreme Court probably will be decided by the Court before the end

¹⁹ *James Stewart & Co. v. Sadrakula*, 60 Sup. Ct. 431.

²⁰ *Osborn v. Ozlin*, 60 Sup. Ct. 758.

²¹ See Monthly Labor Review for November 1939 (pp. 1135-1136).

²² See Monthly Labor Review for March 1940 (pp. 669-670).

of the year. On May 18, 1940, the Government appealed a decision of the Federal District Court in Georgia that declared the Fair Labor Standards Act of 1938 unconstitutional as applied to production of goods within the State.²³ The lower court in this case ruled that the employees were not engaged in interstate commerce, and that if Congress intended the act so to apply, it exceeded its constitutional authority. This case will be watched with interest, since it will give the United States Supreme Court an opportunity to determine for the first time the constitutionality of the Federal act, and also since the opinion of the district court conflicts with that held by more than six other Federal Courts which have been called upon to determine cases involving the wage and hour law.



CONSUMERS' COOPERATIVE LAW OF THE DISTRICT OF COLUMBIA

A COMPREHENSIVE consumers' cooperative law for the District of Columbia was enacted by Congress in June 1940 (Public No. 642). This legislation had received the approval of nearly all groups interested in cooperative organizations. The new law adopted is essentially the "model cooperative law" prepared by a committee appointed by the Secretary of Labor in 1937 to draft a model act.

The provisions of the District of Columbia code relating to business stock corporations made it difficult, if not impossible, to operate a genuine consumer's cooperative under the District laws. For this reason, most of the consumers' cooperatives had been incorporated under the Virginia laws which, however, restrict the use of the word "cooperative" to agricultural cooperatives. Various expedients, therefore, had to be adopted to signify, in the name of the consumers' association, that it was in reality a cooperative organization. The new act regulates cooperatives to insure their democratic and nonprofit character and should protect the public against abuses by organizations which claim to be, but in fact are not, bona fide cooperatives.

Under this act nonprofit associations operating on a "cooperative basis" may be organized. The law defines "cooperative basis" to mean that each member of the association shall have only one vote; that the maximum annual return on share or membership capital shall be limited to 8 percent; and that the net savings, after such payment and after making provision for separate funds, shall be distributed to the patrons on the basis of patronage or retained by the enterprise for expansion or for reduction of charges.

²³ *United States v. F. W. Darby Lumber Co.*, 60 Sup. Ct. 1105. For decision in district court, see 32 Fed. Supp. 734.

As the incorporators are not required to be residents and as the annual meetings are not required to be held in the District, groups in States either without a consumers' cooperative statute, or having an unsatisfactory one, may incorporate under the new act.

Summary of Principal Provisions

The principal provisions of the act are summarized below.

Scope and purpose.—Acquiring, producing, building, operating, manufacturing, furnishing, exchanging, or distributing any type or types of property, commodities, goods, or services for the primary and mutual benefit of the patrons of the association (or their patrons, if any) as ultimate consumers.

Number who may organize.—Five or more natural persons or two or more associations.

Filing articles of incorporation and amendments.—With recorder of deeds.

Filing fee.—Five dollars. Recording, \$1. Amendments, \$1.

Management.—Not less than five directors. Officers shall be president, one or more vice presidents, secretary, and treasurer (last two may be combined) elected annually by directors (unless the bylaws otherwise provide). President and one vice president must be directors.

Issuance of share or membership certificates.—When par value paid in full.

Transfer of shares.—Member desiring to dispose of shares must offer them to association, which is authorized to purchase such holdings. If association fails to repurchase within 60 days of original offer, member may sell unpurchased interest elsewhere, subject to approval of transferee by director.

Attachment of shares.—Exempt to the extent of minimum amount necessary for membership, but not to exceed \$50.

Liability of individual member.—None. Subscribers to shares are liable to the extent of unpaid amount on shares.

Voting.—Each member one vote.

Voting by mail or proxy.—Bylaws may provide for voting by mail. No proxies.

Distribution of earnings.—Not to exceed 6 percent upon paid-up share or membership capital. Total return upon capital distributed for any single period shall not exceed 50 percent of the net savings for that period. Not less than 10 percent of earnings shall be placed in a reserve fund until such time as the fund shall equal at least 50 percent of the paid-up capital. Provision is also made for the allocation of dividends to patrons in proportion to their individual patronage.

Purchase of stock of other associations.—Permitted. Amount not limited.

Annual reports.—To recorder of deeds within 60 days of close of its operations for that year.

Dissolution.—By a vote of two-thirds of members.

Existing organizations.—May come under act by vote of two-thirds of members.

Use of name "cooperative".—May be used only by (1) associations organized under act; (2) groups organized on a cooperative basis under any other law of the District of Columbia; and (3) foreign corporations operating on a cooperative basis and authorized to do business in the District of Columbia. Violations are punishable by fine and imprisonment.

Cost and Standards of Living

THE BUREAU OF LABOR STATISTICS' NEW INDEX OF COST OF LIVING ¹

THIS article presents the Bureau of Labor Statistics' new index of the cost of goods purchased by wage earners and lower-salaried workers in large cities. The index measures changes from time to time in the cost of the goods customarily purchased by families in this group.

The Bureau's original cost-of-living index was initiated during the last war when rapid changes in living costs, particularly in shipbuilding centers, made such an index essential in wage negotiations. At the beginning of the war, cost-of-living information was limited to the cost-of-food index, which was begun in 1903 and carried back to 1890. Figures were not available to show the importance of each item in the spending of wage earners and clerical workers at that time. It was, therefore, necessary for the Bureau to undertake a series of studies of family expenditures, before indexes reflecting changes in the cost of all goods entering into the budgets of moderate-income families could be computed. These studies, begun in the shipbuilding centers in 1917, were gradually extended to cover a sample of large cities throughout the country.

In 1919 the Bureau began the publication of cost-of-living indexes for individual cities, weighted according to the consumption of wage earners and clerical workers in 1917-19.² Preliminary estimates of changes in living costs throughout the United States were published at intervals from October 1919 on,³ and in February 1921 regular publication was established in the form maintained until 1935. In the fall of that year, the Bureau introduced improved methods of calculating the indexes.⁴

The index has been widely used as a measure of changes in living costs by labor groups throughout the country, by corporations, by educational institutions, and by other government agencies. It has

¹ Prepared by the Cost of Living Division on the basis of prices secured by the Retail Price Division.

² See U. S. Bureau of Labor Statistics Bull. No. 357: *Cost of Living in the United States*, for a description of the study of family expenditures which supplied the weights for the Bureau's original cost-of-living index.

³ *Monthly Labor Review*, October 1919 (pp. 1-8): *Summary of Increased Cost of Living, July 1914 to June 1919*, by Hugh S. Hanna.

⁴ *Monthly Labor Review*, September 1935 (pp. 819-837): *Revision of Index of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers*, by Faith M. Williams, Margaret H. Hogg, and Ewan Clague.

served not only in wage negotiations, and in the adjustment of salaries, but also in studies of the effect of fiscal and production policies upon the cost of living of the average urban family.

It has been generally recognized for some time that there was a need for the introduction of new items among those included in the index. Consumption habits have changed greatly since 1919. In the period since the end of the last war, the budgets of wage earners and clerical workers in the United States have included a great variety of consumers' goods which were not available previously. Some of these goods were actually new—rayon fabrics, for example, and certain types of electrical equipment. Some of them had been in the market before, but at prices higher than moderate-income families could pay. Some of the differences were merely changes in fashion and custom.

Certain of these changes in type of goods purchased were readily introduced into family spending without any fundamental change in the family budget. The substitution of low shoes for high shoes involved little change in the amount actually spent for shoes. Rayon slips replaced cotton corset covers and cotton petticoats without any great change in the clothing budget when the substitution occurred. Rayon dresses were gradually substituted for silk dresses. Pajamas directly replaced nightshirts. Living-room furniture was bought in matched suites instead of the previously purchased single pieces. Such changes were readily incorporated into the index without any changes in weight. As a matter of fact, they are changes which it was necessary to reflect in the index, as many of the items originally priced had become obsolete and could no longer be found in retail stores.

There was, however, another type of change in family expenditures which it was impossible to take account of, in computing the cost-of-living index, without a new study of purchasing habits. Isolated studies of expenditures had shown that many more wage earners and lower-salaried workers were living in houses with electric current than had been the case at the end of the war, that many of them were buying automobiles and radios, some of them were buying electric refrigerators. Fashions in dress had changed so much that it became apparent that mere substitution of a new type of garment for an equivalent quantity of one previously worn did not adequately represent contemporary clothing purchases.

Among the more important studies indicating the extent of the change during the decade are the Bureau of Labor Statistics' survey of the expenditures of Federal employees in five cities made in 1927-28 and of Ford employees in Detroit made in 1929, and the study of the expenditures of Federal employees in the District of Columbia made in 1933 by the Bureau of Labor Statistics and the Bureau of Home

Economics.⁵ None of these studies, however, provided the complete information on the family expenditures of the wage-earner and clerical group in large cities throughout the country which was required to provide a systematic basis for the revision of the cost-of-living index.

In the summer of 1934, funds were made available to the Bureau for initiating a new Nation-wide study of the disbursements of wage earners and lower-salaried clerical workers.⁶ The study was planned so as to provide the data required to effect a complete revision in the weights of the cost-of-living index. The information furnished by that study has provided the basis for the present revision. The field survey was completed in 1936. The revised weights thus represent family expenditures for 1 year in the period 1934 to 1936.

A detailed consideration of all the steps involved in computing the new index is outside the scope of the present article. A bulletin giving, in addition to a detailed account of the various procedures employed, a list of the weights for each city is now in preparation.

In the present article there is presented a general review of the items included in the new index and their weights, as well as the procedures used in the derivation of the weights and in the computation of the index.

On the recommendation of the Central Statistical Board,⁷ the new index has been calculated using average costs in the period 1935-39 as a base. The Central Statistical Board recommended also that other statistical agencies of the Government adopt this base period for general-purpose index numbers. Such agreement will provide uniformity in base period for many of the indexes now published, and will facilitate comparison between their movements. Because interest usually attaches to change in cost of living from a recent rather than a remote period, it was generally agreed that the base period should be a recent one.

New Indexes, March 1935 to March 1940

Table 1 and chart 1 show the movement of the new group indexes and of the all-items index from March 1935 to March 1940 for 33 large cities combined. The indexes by cities for the same period are given in table 14 at the end of the article.

⁵ A complete bibliography of family-expenditure studies made during this period is to be found in F. M. Williams and C. C. Zimmerman: *Studies of Family Living in the United States and Other Countries* (U. S. Department of Agriculture, Misc. Pub. No. 223).

⁶ The results of this study, as well as a detailed description of methods used, may be found in Bureau of Labor Statistics Bulletins Nos. 637 to 641.

⁷ See release of the Central Statistical Board of June 3, 1940. The change of base period as such would not, of course, involve any revision of the data upon which the indexes are constructed. The change of base merely has the effect of making it more convenient for research workers and others using the indexes to compare several series of economic data in the way which will, in the opinion of the Central Statistical Board, be of most use. The Bureau of Labor Statistics will be glad to compute its cost-of-living indexes on other bases for the assistance of persons who wish to make special comparisons.

TABLE 1.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 33 Large Cities Combined, March 15, 1935–March 15, 1940*

[Average 1935–39=100]

Period	All items	Food ¹	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1935–March 15.....	97.8	99.7	96.8	93.8	102.1	94.2	98.1
July 15.....	97.6	99.4	96.7	94.1	99.0	94.5	98.2
October 15.....	98.0	100.0	96.9	94.6	100.5	95.7	97.9
1936–January 15.....	98.8	101.5	97.3	95.1	100.8	95.8	98.2
April 15.....	97.8	98.4	97.4	95.5	100.8	95.7	98.4
July 15.....	99.4	102.6	97.2	96.5	99.1	95.9	98.7
September 15.....	100.4	104.8	97.5	97.1	99.9	96.6	99.0
December 15.....	99.8	101.6	99.0	98.1	100.5	97.9	99.1
1937–March 15.....	101.8	105.0	100.9	98.9	100.8	102.6	100.2
June 15.....	102.8	106.0	102.5	101.0	99.2	104.3	100.9
September 15.....	104.3	107.9	105.1	102.1	100.0	106.7	101.7
December 15.....	103.0	102.7	104.8	103.7	100.7	107.0	102.0
1938–March 15.....	100.9	97.5	102.9	103.9	101.2	104.7	101.6
June 15.....	100.9	98.2	102.2	104.2	98.6	103.1	101.8
September 15.....	100.7	98.1	101.4	104.2	99.3	101.9	101.6
December 15.....	100.2	97.2	100.9	104.3	100.0	101.7	101.0
1939–March 15.....	99.1	94.6	100.4	104.3	100.1	100.9	100.5
June 15.....	98.6	93.6	100.3	104.3	97.5	100.6	100.4
September 15.....	100.6	98.4	100.3	104.4	98.6	101.1	101.1
December 15.....	99.6	94.9	101.3	104.4	99.9	102.7	100.9
1940–March 15.....	99.8	95.6	102.0	104.5	100.6	100.5	100.8

¹ Covers 51 cities.

The Construction of the New Index

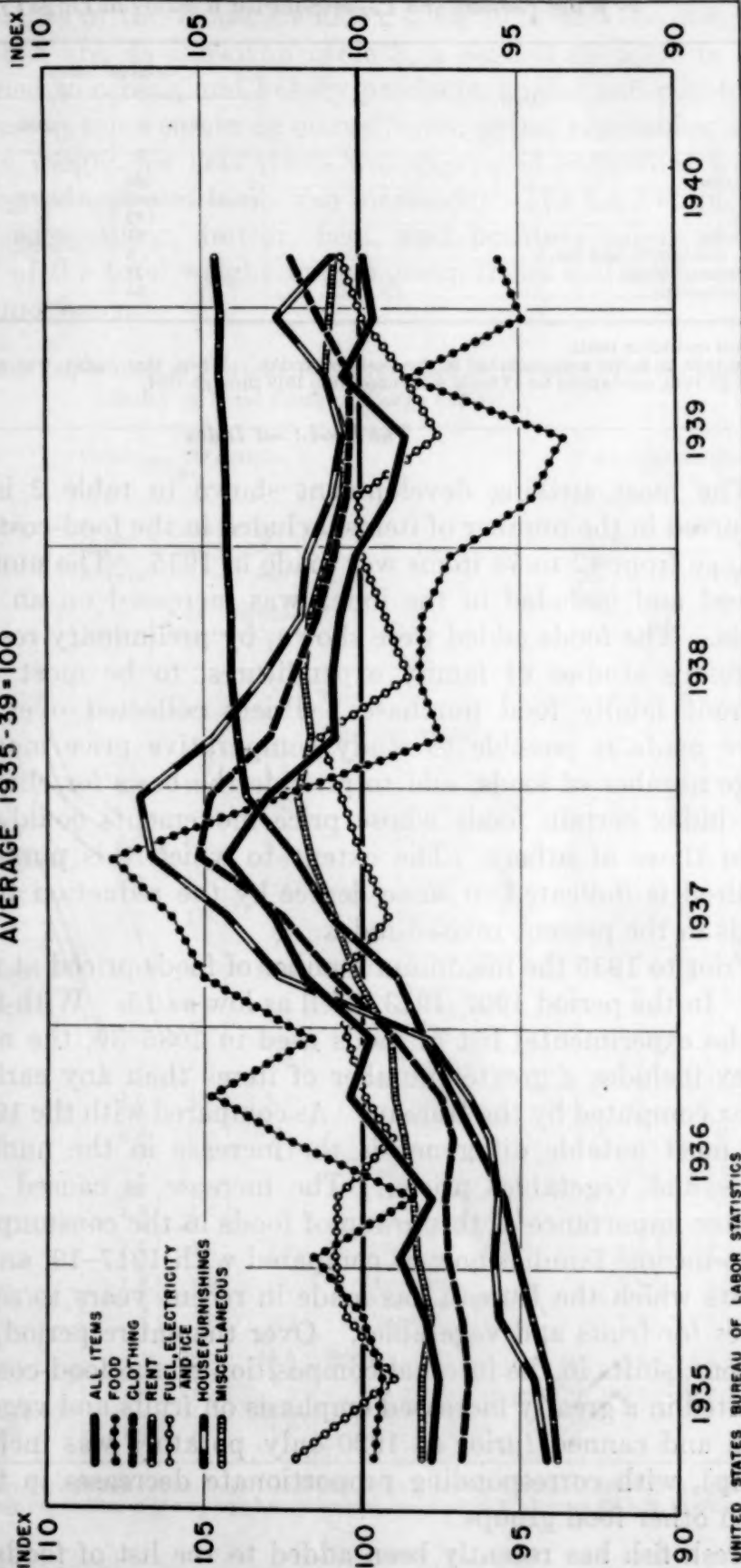
NUMBER OF ITEMS INCLUDED

The new cost-of-living index is based on prices of 198 goods and services.⁸ In addition rents are collected at each pricing period for the types of dwellings occupied by wage earners and clerical workers. The number of dwellings for which rents are secured varies according to size of city from 450 in Manchester to 2,750 in New York City.

It is of some interest to follow the development of the cost-of-living index since its inception. Table 2 shows the number of items included in each group shortly after the index was initiated, for the last period for which the original index was published, and for the new index. The difference between the first two columns for items other than food reflects changes in the composition of the index occasioned by substitutions for items which had become obsolete or which for some other reason could no longer be priced. Comparison of the last two columns indicates the difference in the composition of the original and the new index on September 15, 1939.

⁸ This figure does not represent the number of qualities priced. For a large proportion of the items included in the index more than one quality is priced; in the case of the more important items, as many as four in a given city.

INDEX NUMBERS OF COSTS OF GOODS PURCHASED BY WAGE-EARNERS AND SALARIED WORKERS IN LARGE CITIES, 1935-40 AVERAGE 1935-39=100



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 2.—*Number of Goods and Services Included in Index of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in Large Cities*¹

Item	Original index		New index
	1919	1939	1939
All items.....	165	202	198
Food.....	² 42	84	54
Clothing.....	61	63	48
Fuel, electricity, and ice.....	6	6	10
Housefurnishings.....	21	16	26
Miscellaneous.....	35	33	60

¹ Not including rents.² In 1919, 22 items were included in the food-cost index. When that index was revised in 1935 back through 1919, quotations for 42 foods were used from 1919 through 1934.*The Food-Cost Index*

The most striking development shown in table 2 is that which occurred in the number of items included in the food-cost index. The change from 42 to 84 items was made in 1935. The number of items priced and included in the index was increased on an experimental basis. The foods added were shown, by preliminary results from the Bureau's studies of family expenditures, to be most important in current family food purchases. Prices collected over the interval have made it possible to study comparative price movements of a large number of foods, and to provide the basis for eliminating from the index certain foods whose price movements could be predicted from those of others. The extent to which this purpose has been realized is indicated to some degree by the reduction from 84 to 54 foods in the present revised index.

Prior to 1935 the maximum number of foods priced at any time was 42. In the period 1907-1913 it fell as low as 15. With the exception of the experimental list of foods used in 1935-39, the new food-cost index includes a greater number of items than any earlier food-cost index computed by the Bureau. As compared with the 1921-34 index, the most notable difference is the increase in the number of fresh fruits and vegetables priced. The increase is caused both by the greater importance of this group of foods in the consumption of moderate-income families now as compared with 1917-19, and the special efforts which the Bureau has made in recent years to secure reliable prices for fruits and vegetables. Over the entire period, 1890 to the present, shifts in the internal composition of the food-cost index have resulted in a greatly increased emphasis on fruits and vegetables, both fresh and canned (prior to 1920 only potatoes was included in this group), with corresponding proportionate decreases in the emphasis given other food groups.

Fresh fish has recently been added to the list of foods priced. In addition, meals away from home are to be incorporated in the index

during the present fiscal year. The most important differences between the weights of the food-cost index since 1935 and the weights in the new index are, as shown in table 3, a general decrease in the weights assigned to cereals and bakery products, apples and potatoes, and an increase in the weights on citrus fruits, green vegetables, and poultry. The weight for beef items was decreased somewhat while that for pork products and lamb was increased. The food staples—bread, milk, eggs, sugar, butter, beef, and potatoes—account for almost a half of the total weight in this group index and continue to dominate its movements.

TABLE 3.—*Relative Importance of Various Items Included in Bureau of Labor Statistics' Index of Food Costs in Large Cities*

Item	Percentage distribution of—			Item	Percentage distribution of—		
	Average costs in 1935-39: New index ¹	Costs in September 1939			Average costs in 1935-39: New index ¹	Costs in September 1939	
		New index ¹	Original index ²			New index ¹	Original index ²
Cereals and bakery products.....	15.6	15.0	18.5	Eggs.....	5.5	5.9	5.7
Cereals—				Fruit and vegetables:			
Flour, white.....	1.8	1.7	2.4	Fresh.....	16.5	15.8	14.2
Macaroni.....	1.0	.9	1.0	Apples.....	2.1	1.5	3.0
Corn flakes.....	1.4	1.3	1.4	Bananas.....	1.4	1.4	.9
Corn meal.....	.3	.3	.8	Oranges.....	3.4	3.7	.9
Bakery products—				Beans, green.....	.8	.6	.1
Bread, white.....	6.7	6.5	8.9	Cabbage.....	.7	.7	.8
Bread, whole wheat.....	.8	.8	.9	Carrots.....	.9	.9	1.0
Bread, rye.....	1.2	1.1	1.2	Lettuce.....	1.7	1.7	.9
Cake, vanilla cookies.....	1.8	1.8	1.4	Onions.....	1.1	.9	.7
Soda crackers.....	.6	.6	.5	Potatoes.....	3.2	3.2	5.3
Meats, fish, and poultry.....	28.2	29.0	29.9	Spinach.....	.8	.9	.2
Beef—				Sweetpotatoes.....	.4	.3	.4
Round steak.....	3.8	4.1	6.5	Canned.....	4.1	3.8	1.3
Rib roast.....	4.6	4.8	3.0	Peaches.....	.6	.5	.1
Chuck roast.....	1.7	1.8	4.0	Pineapple.....	.4	.4	.1
Veal—Cutlet.....	1.9	2.0	2.3	Corn.....	.7	.6	.3
Pork—				Peas.....	.9	.8	.4
Chops.....	3.5	3.7	3.3	Tomatoes.....	1.5	1.5	.4
Bacon, sliced.....	1.9	1.6	1.6	Dried.....	1.0	1.0	1.1
Ham, whole.....	2.2	2.2	2.7	Prunes.....	.6	.6	.6
Salt.....	.3	.3	.3	Navy beans.....	.4	.4	.5
Lamb—				Beverages.....	3.4	3.3	3.6
Leg.....	1.2	1.3	1.1	Coffee.....	2.6	2.5	2.1
Rib chops.....	1.3	1.5	.7	Tea.....	.8	.8	1.5
Poultry—Roasting chickens.....	3.3	3.2	1.9	Fats and oils.....	3.2	3.0	2.8
Fish—				Lard.....	1.1	.9	1.0
Fresh.....	1.7	1.9	-----	Shortening.....	.7	.7	.6
Salmon, pink, canned.....	.8	.6	2.5	Mayonnaise.....	.9	.9	.3
Dairy products.....	19.1	19.1	18.9	Oleomargarine.....	.3	.3	.8
Butter.....	5.4	5.1	5.5	Peanut butter.....	.2	.2	.1
Cheese.....	1.6	1.5	.8	Sugar.....	3.4	4.1	4.0
Milk, fresh (delivered).....	11.1	11.5	11.6	All items, this index.....	100.0	100.0	100.0
Milk, evaporated.....	1.0	1.0	1.0				

¹ Based on average expenditures of employed wage earners and clerical workers in 1934-36; 51 cities.

² Based on average expenditures of employed wage earners and clerical workers in 1917-19; 51 cities.

The Clothing-Cost Index

Clothing makes up a somewhat smaller proportion of total family expenditure at the present time than in 1917-19. The increase in the number of centrally heated dwellings, protection from the weather provided by automobile travel, and changes in fashion appear to have somewhat reduced the quantity of clothing worn by city families in this country over the period since the Bureau's cost-of-living index was first constructed. In addition, the production of synthetic fabrics of different kinds now makes it possible to appear suitably dressed on a smaller expenditure than in 1919.

The number of clothing items priced for the new index is somewhat smaller than for the original cost-of-living index. The decrease in the number of items was caused by the virtual elimination of the prices of children's clothing from the index. Children's clothing accounts for less than one-fifth of the total clothing expenditure of the 14,469 families from which expenditure data were obtained for the purpose of supplying weights for the new index. A study of the movement of the prices of children's clothing shows that they move very closely with the prices of adults' clothing of similar type. By adding expenditures for children's clothing to those of adults, proper proportions have been preserved within the weights for the clothing index (see p. 375), and a considerable saving in price collection has been effected.

The items included in the index of clothing costs in 1919, and in the original and the new indexes on September 15, 1939, illustrate the process of gradual revision which has taken place in the internal composition of this group index in the 20-year interval. The changes which took place in the items included in the original index between 1919 and 1939 were quite as large as the changes which occurred in 1939 as a result of the revision.

The most important item added to the pricing is dry cleaning, with a weight of almost 4 percent (see table 4). The weights on men's wool suits, now constituting 11.3 percent of the clothing index, women's silk hose, now 6.8 percent of the clothing index, and women's shoes, now 7.4 percent, have more than doubled. Children's clothing, which formed more than a third of the total index, now forms less than 5 percent of it. Because of this weight reduction, most of the weights of other items included in the pricing for the clothing index have been increased.

TABLE 4.—Relative Importance of Various Items Included in Bureau of Labor Statistics' Index of Clothing Costs in Large Cities

Item	Percentage distribution of—			Item	Percentage distribution of—		
	Average costs in 1935-39: New index ¹	Costs in September 1939			Average costs in 1935-39: New index ¹	Costs in September 1939	
		New index ¹	Original index ²			New index ¹	Original index ²
<i>Wool</i>				<i>Silk and rayon</i>			
Men:				Men: Socks	1.0	1.0	1.0
Overcoats	2.8	2.8	1.6	Women:			
Topcoats	1.3	1.3	.3	Dresses	6.6	6.7	8.5
Suits	11.3	11.3	4.8	Panties	1.7	1.7	1.2
Trousers	1.3	1.3		Bloomers			.4
Jackets	1.1	1.1		Slips	1.4	1.4	1.5
Sweaters	1.9	1.9	.5	Hose	6.7	6.8	2.5
Women:				Yard goods	.7	.6	
Coats, heavy, fur trim	3.7	3.8	5.9				
Coats, heavy, plain	1.9	2.0					
Coats, light, plain	1.9	1.9					
Skirts	1.8	1.8					
Dresses	1.0	1.0					
Robes			.5				
Hats	1.6	1.6	1.0				
Boys:				Men:			
Suits			5.1	Shoes, low	4.4	4.5	4.3
Trousers			1.1	Shoes, work	1.1	1.1	
Jackets			1.9	Rubbers	1.0	1.0	.2
Sweaters			.4	Women:			
Girls:				Shoes, low	7.4	7.4	3.6
Coats	.5	.5	2.0	Rubbers			.4
Dresses			.5	Boys: Shoes, low			6.6
Sweaters			.3	Girls:			
Yard goods: Flannel			2.3	Shoes, low			5.6
				Rubbers			.3
				Children: Shoes	3.7	3.7	
<i>Cotton</i>				<i>Other garments</i>			
Men:				Men:			
Suits	.1	.1	.3	Hats, fur-felt	1.3	1.3	.7
Trousers	.9	.9	.6	Hats, straw	.3	.3	.7
Overalls	1.1	1.0	.5	Gloves, leather			.7
Shirts, work	1.3	1.2	.6	Neckties	1.2	1.2	.6
Shirts, business	3.3	3.2	2.0	Women:			
Pajamas	1.1	1.1	1.3	Coats, fur	1.3	1.2	
Shorts	.6	.6	.6	Gloves, leather	1.0	1.0	.5
Undershirts	1.3	1.3	.4	Girdles	1.5	1.5	1.4
Union suits	1.4	1.3	1.0	Girdle-brassieres			1.7
Socks	2.7	2.7	1.9	Brassieres			1.2
Women:				Boys: Neckties			.3
Dresses, street	2.0	2.0	2.2				
Housedresses	2.1	2.0	1.3				
Nightgowns	1.0	1.0	.8				
Boys:							
Shirts			1.6				
Pajamas			.9				
Shorts			.8				
Undershirts			.5				
Trousers			1.1				
Girls:							
Dresses			1.5				
Pajamas			.8				
Bloomers			1.7				
Socks and anklets			1.2				
Yard goods: Percale	1.0	1.0	.3				

¹ Based on average expenditures of employed wage earners and clerical workers in 1934-36; 33 cities.² Based on average expenditures of employed wage earners and clerical workers in 1917-19; 32 cities.**Rent Index**

The sample of dwellings on which the Bureau's rent indexes are based is necessarily revised continuously. At each pricing period it is found that some house either has been torn down, or that it has been remodeled or has deteriorated, so that it does not provide housing facilities equivalent to those provided at the last pricing period. In

each case where this occurs, another dwelling in the same neighborhood with approximately the same facilities is substituted and its rent is obtained for the current quarter and the previous quarter. In this way the rent index for each quarter is based on rents for equivalent dwellings at two successive dates, 13 weeks apart.

In 1935, a systematic revision of the rent sample covered was undertaken by the Bureau's Retail Price Division. Advantage was taken of the Real Property Inventory and of local studies of housing to secure a sample which would be quite representative of housing conditions in the cities covered. The samples are now so selected as to give representation to each rental range and type of dwelling, proportional to that obtaining in the entire city.⁹ Indexes of rental cost for use with the cost-of-living index are computed separately for each rental range and the indexes are weighted together to obtain an over-all index for wage earners and lower-salaried workers in the entire city. The weights used for each rental range are derived, as are the weights for the other groups, from the information provided by the recent study of the family expenditures of this group.

Fuel, Electricity, and Ice

The new group index which covers fuel, electricity, and ice reflects the changes which have taken place in the housing facilities secured by employed wage earners and clerical workers in the United States since 1919. In 1934-36, 65 percent of the 14,469 families that furnished the data, by means of which the new list of items were selected and the new list of weights were computed, had ice refrigerators and 28 percent had electric or other mechanical refrigerators.

Fuel oil has been added to this index, because in some sections of the country, particularly New England, an appreciable number of families in this group are now living in houses with oil burners. Coke has been added to the indexes for the North Atlantic and North Central cities (except Pittsburgh and Scranton) and for Birmingham, Portland (Oreg.), and Seattle. Although not important in the national total, briquettes are commonly used in two cities, Minneapolis and Seattle, where they are now priced.

Differences between the weights for the new group index for fuel, electricity, and ice and for the original group index, as shown in table 5, are very striking. A material increase in the use of electricity for lighting and for power for household appliances, as well as a material decrease in the use of coal for cooking, has resulted in giving a much higher weight to electricity in the new index and lower weights to both coal and gas. The use of gas for cooking has increased considerably, but the use of gas for illumination has decreased greatly. The result has been a decline in the relative importance of gas in the index.

⁹ The Bureau's Retail Price Division now computes indexes of rental costs for all types of dwellings over all rental ranges in each community.

TABLE 5.—*Relative Importance of Various Items Included in Bureau of Labor Statistics' Index of Fuel and Light Costs in Large Cities*

Item	Percentage distribution of—		
	Average costs in 1935-39: New index ¹	Costs in September 1939	
		New index ¹	Original index ²
Coal, anthracite.....	13.8	13.6	30.1
Coal, bituminous.....	13.7	13.9	16.0
Coke.....	5.7	5.5	.....
Briquettes.....	.1	.1	.....
Fuel oil.....	4.5	4.5	.....
Wood.....	1.1	1.1	5.1
Electricity.....	25.0	24.4	3.8
Gas.....	23.8	24.4	41.9
Kerosene.....	.8	.8	3.1
Ice.....	11.5	11.7	.....
All items, this index.....	100.0	100.0	100.0

¹ Based on average expenditures of employed wage earners and clerical workers in 1934-36; 33 cities.

² Based on average expenditures of employed wage earners and clerical workers in 1917-19; 32 cities.

Housefurnishings

Differences between the list of housefurnishing items included in the original index in 1919 and in the new index reflect changes both in goods purchased and in method of purchase. Matting rugs, baby carriages, and sewing machines are now purchased much less frequently than at the end of the last war. Bedroom and dining-room furniture are purchased quite as frequently but are now bought as suites rather than as separate pieces. The number of items listed as priced for the original housefurnishings index in 1939 is only 16, as compared with 21 in 1919, because matting rugs and baby carriages were no longer priced for the index and bedroom and dining-room furniture was priced in suites which count as 2 items rather than 5. In recent years, baby carriages have become increasingly difficult to price in stores patronized by wage earners and lower-salaried workers. Demand for new baby carriages has fallen off among families in this group. Those with automobiles are apt to take the baby to ride in a basket in the car; general decreases in the number of children in urban families has resulted in an increase in the supply of second-hand baby carriages. In addition a variety of very inexpensive steel-frame-canvas carts have appeared on the market, which have been substituted by some families for the more substantial standard baby carriage of the past.

The much larger weight for electrical appliances in the housefurnishings index corresponds to the higher weight on electricity in the fuel, electricity, and ice index. (See table 6.) Radios, light bulbs, washing machines, vacuum cleaners, and electric refrigerators—all additions to the items priced—now account for almost 40 percent of the weight in this group.

TABLE 6.—*Relative Importance of Various Items Included in Bureau of Labor Statistics' Index of Housefurnishing Costs in Large Cities*

Item	Percentage distribution of—			Item	Percentage distribution of—		
	Average costs in 1935-39: New index ¹	Costs in September 1939			Average costs in 1935-39: New index ¹	Costs in September 1939	
		New index ¹	Original index ²			New index ¹	Original index ²
Towels, cotton.....	1.4	1.3	0.9	Radios.....	10.2	9.7	
Sheets.....	3.1	2.8	5.4	Sewing machines.....	1.6	1.6	10.9
Curtains.....	3.8	3.6		Light bulbs.....	1.1	1.1	
Blankets.....	2.0	2.0	3.4	Washing machines.....	6.3	6.4	
Rugs, wool.....	3.9	4.0	11.4	Vacuum cleaners.....	3.0	3.0	
Carpet, wool.....	3.0	3.2		Refrigerators:			
Felt-base floor covering.....	1.2	1.1		Electric.....	15.8	15.9	
Linoleum.....	1.1	1.1	4.2	Gas.....	1.5	1.5	
Living-room suites.....	11.5	11.7		Ice.....	.2	.2	2.3
Dining-room suites.....	5.0	5.1	8.5	Stoves, cook.....	6.6	7.0	24.6
Bedroom suites.....	8.5	8.5	8.0	Dinnerware.....	1.4	1.5	
Studio couches.....	1.8	1.8	3.8	Glassware.....	.5	.5	
Tables.....			1.1	Brooms.....	1.1	1.1	1.6
Chairs.....			4.5				
Mattresses.....	2.8	2.7	6.7	All items, this index.....	100.0	100.0	100.0
Bedsprings.....	1.6	1.6	2.7				

¹ Based on average expenditures of employed wage earners and clerical workers in 1934-36; 33 cities.² Based on average expenditures of employed wage earners and clerical workers in 1917-19; 32 cities.*Miscellaneous Items*

It is more difficult to provide adequate representation in a cost-of-living index for the items included in the miscellaneous group than for any other group of items in the family budget. The larger number of items in this group in the new index reflects the greater variety in the expenditures of moderate-income families in the thirties as compared with their expenditures at the end of the last war.

Automobiles now account for almost 8 percent of the weight of the miscellaneous-items index, as indicated in table 7, with gas and oil accounting for another 8 percent and other expenses associated with automobile operation accounting for a weight of 4 percent. In combination, automobile purchase and operation constitute almost one-fifth the weight in the new miscellaneous index. As a result, the relative importance of most of the other items included in this group is lower in the new than in the original index. The weight for medical care is less by half. The relative weights for laundry service, telephone service, and movies are also lower.¹⁰ The only other items for which the weights are increased are for cigarettes and toilet articles.

¹⁰ It is important to note that family expenditures for these services have not decreased in the period since 1919. On the contrary, they have increased. Part of the reason for the decrease in the relative weight is that these services were somewhat overweighted in the original index. (See p. 380 for a discussion of the difficulties involved in weighting by purchases of the specific items priced, the method used in the original index.)

TABLE 7.—Relative Importance of Various Items Included in Bureau of Labor Statistics' Index of Miscellaneous Costs in Large Cities

Item	Percentage distribution of—			Item	Percentage distribution of—		
	Average costs in 1935-39: New index ¹	Costs in September 1939			Average costs in 1935-39: New index ¹	Costs in September 1939	
		New index ¹	Original index ²			New index ¹	Original index ²
Transportation.....	29.5	29.1	17.0	Household operations.....	13.5	13.3	22.0
Automobile.....	7.9	7.9	.....	Laundry service.....	3.6	3.6	12.0
Gasoline.....	6.9	6.6	.....	Telephone service.....	2.8	2.8	7.3
Motor oil.....	.8	.8	.....	Domestic service.....	.4	.4	.....
Tires and tubes.....	.8	.8	.....	Postal service.....	.6	.6	.....
Automobile repairs.....	.7	.7	.....	Water rent.....	1.2	1.2	.....
License and taxes.....	1.0	1.0	.....	Laundry soap—			
Automobile insurance.....	.9	.9	.....	Bar.....	1.0	1.0	.7
Streetcar fare.....	9.3	9.2	17.0	Flakes and chips.....	.7	.7	1.1
Bus fare.....	.8	.8	.....	Granulated.....	.9	.9	.3
Railroad fare.....	.4	.4	.....	Laundry starch.....	.3	.3	.....
Medical care.....	14.1	14.0	31.0	Cleaning powder.....	.7	.6	.6
Physician—				Matches.....	.4	.4	.....
Office visit.....	2.1	2.1	5.4	Toilet paper.....	.9	.8	.....
House visit.....	2.0	2.0	8.1	Recreation.....	18.7	19.3	23.9
Obstetrical case.....	.5	.6	1.8	Newspapers.....	4.4	4.6	5.8
Surgeon—Appendectomy.....	.4	.4	.....	Motion pictures—			
Specialist—Tonsillectomy.....	.4	.4	.....	Adult.....	5.0	5.0	10.1
Dentist—				Child.....	.8	.7	.....
Filling.....	1.0	1.0	3.7	Tobacco—			
Crown.....	.....	.....	1.0	Cigars.....	.8	.8	2.1
Inlay.....	.....	.....	1.1	Cigarettes.....	6.7	7.2	3.6
Extraction.....	.3	.4	.....	Cigarette tobacco.....	.....	.....	.6
Cleaning.....	1.3	1.3	.....	Pipe tobacco.....	1.0	1.0	1.0
Plates.....	.....	.....	.7	Plug tobacco.....	.....	.....	.7
Hospital—				Personal care.....	8.6	8.8	6.1
Pay ward.....	.6	.6	2.0	Barber service—			
Room.....	1.0	1.0	.....	Shave.....	.....	.....	2.4
Nurse, private.....	.3	.2	.....	Haircut, men.....	2.8	2.9	2.0
Optometrist—Glasses.....	.8	.8	2.4	Beauty shop—			
Medicine and drugs—				Haircut, women.....	.4	.5	.....
Prescriptions.....	1.0	1.0	3.9	Wave set.....	.7	.7	.....
Aspirin.....	.3	.3	.2	Permanent wave.....	.7	.7	.....
Quinine.....	.1	.1	.1	Toilet articles—			
Cold remedy ointment.....	.3	.3	.....	Toilet soap.....	1.3	1.3	.8
Iodine.....	.2	.1	.4	Shaving cream.....	.3	.3	.2
Castor oil.....	.1	.1	.....	Toothpaste.....	1.1	1.1	.7
Milk of magnesia.....	.3	.2	.....	Face powder.....	.3	.3	.....
Laxative.....	.2	.1	.....	Cleansing cream.....	.4	.4	.....
Vaseline.....	.....	.....	.2	Sanitary napkins.....	.3	.2	.....
Accident and health insurance.....	.9	1.0	.....	Razor blades.....	.3	.4	.....
				Gifts, contributions, and other unallocated items ³	15.6	15.5	.....
				All items, this index.....	100.0	100.0	100.0

¹ Based on average expenditures of employed wage earners and clerical workers in 1934-36; 33 cities.² Based on average expenditures of employed wage earners and clerical workers in 1917-19; 32 cities.³ Costs for these items in the original index were assumed to move as did costs for miscellaneous items. In the new index, they are assumed to move as do costs for all items, but are computed as a part of the miscellaneous index.

DERIVING WEIGHTS FOR COMMODITIES AND SERVICES PRICED IN EACH CITY

The weights used in combining price ratios for individual commodities and services into the cost-of-living indexes shown in tables 1 and 14 represent, as has been indicated, actual family expenditures of employed wage earners and clerical workers, in the cities actually covered by the cost-of-living indexes.¹¹ Significant differences were

¹¹ Except in the case of Savannah, for which average expenditures in Southeastern cities were combined as weights.

found between average expenditures for food, housing, fuel, electricity, and ice, and miscellaneous items in the individual cities in given regions, and weights for these group indexes have therefore been based on average expenditures by the wage-earner and lower-salaried group in each city.

Expenditures for items of clothing and housefurnishings have a much higher variability from family to family in a given year, and from year to year in a given family than most other items in the budget. There are large random variations in average annual expenditures for specific items in these two groups by families in cities of the same size within the same region. On that account, the weights for specific items of clothing and housefurnishings have been derived from average expenditures by region, rather than from averages for the individual cities in given regions.

If every item purchased by wage earners and lower-salaried workers were priced for inclusion in the index, the question of what weight to give to any specific item would be automatically solved. In such a case the weight would simply be the average expenditure by families of wage earners and lower-salaried workers for that item. In ordinary practice, however, all index numbers are samples in the sense that they do not include all the commodities which might be priced. If the procedure of giving each item priced its specific weight is followed in the case where the index is a sample, however, it may result in giving a subgroup of commodities—fruits and vegetables, for example—a weight different in the index from the weight it has in family food expenditures. The cost of the specific fruits and vegetables priced for the index may form 12 percent of the cost of all foods priced, but expenditure for all fruits and vegetables constitutes 20 percent of actual family food expenditures. Giving each item its specific weight would, therefore, result in underweighting fruits and vegetables and overweighting other groups within which relatively more items might be priced.

The procedure followed in the construction of the Bureau's cost-of-food indexes since 1935 avoids such underweighting by giving fruits and vegetables their actual weight, say 20 percent, regardless of the percent the priced items form of total costs in the index. The effect of such a procedure is to impute the price movement of priced fruits and vegetables to all fruits and vegetables whether priced or not.

The assumption on which the method of imputed weights is based is that broad groups of items have distinctive price movements, so that more accurate results are obtained by imputing the price movement of certain priced foods to all similar foods than by making no assumptions as to the movement of unpriced foods. Subgroups—beef, for example—have distinctive price movements, so that accuracy is gained by imputing the movement of priced beef items to the cost of all types

of beef. This can easily be accomplished by weighting the price movement of priced beef items by the actual expenditure on all beef items. To decide on the actual imputations to be used, it is necessary to have a detailed knowledge of price movements. Before beef can be used as a subgroup for imputation, it is necessary to know whether beef items do have a distinctive price movement. Therefore, for the purpose of deriving weights for the revised index, the relationship of price movements was studied. In addition to providing the basis for a detailed system of imputations, this study also provided the basis for eliminating certain commodities from pricing, since it is unnecessary to price two commodities with highly correlated price movements.

There is, of course, no logical reason why this process of imputation need be confined to the food group, and in the new index the weights for all the group indexes have been derived by this method. A complete tabulation of all the imputations used cannot be presented here. An example of the derivation of weights for items of housefurnishings for white families in the West North Central region will illustrate the procedure used.¹²

Total annual expenditures for housefurnishings in the West North Central region averaged \$68.97. When these expenditures were analyzed in relation to the items which it seemed most important to price for the housefurnishings index, it was found that they were divided as follows:

Total expenditure for 26 items to be priced.....	\$54. 85
Total expenditure for items not priced.....	14. 12
<hr/>	
Expenditures for unpriced items having the same price movement as a given priced item.....	6. 45
Expenditures for other unpriced items in subgroups represented by priced items.....	4. 02
Expenditures for subgroups not represented by priced items.....	3. 65
<hr/>	
Grand total.....	68. 97

Table 8 illustrates the method by which final weights for the priced items were computed in such a manner that they represent total expenditures for housefurnishings in this region.

The items priced for the housefurnishings index are shown in table 8 by the subgroups into which they fall. Column 1 gives the actual family expenditure on each of these items. For each of the priced items, there is sometimes one or more than one commodity with a very similar price movement. From a study of price movements, it is known, for example, that desks have a price movement very close to that of living-room suites, while bookcases and upholstered chairs

¹² The Bureau's Cost of Living Division has in process of preparation a bulletin which will describe in detail the procedures used in calculating the new index.

may also be expected to have price movements similar to that of living-room suites. The average expenditure on these three items, \$1.02, has therefore been added to the expenditure for living-room suites, (column 2). For some other items, however—for example, vacuum cleaners—there are no other items with similar price movements and, as a result, no direct allocations have been made of the expenditures for such items.

TABLE 8.—*Method of Deriving Imputed Weights for Housefurnishings-Group Index, West North Central Region (White Families)*

Subgroup and items priced	Expenditure for—		Proportionate share of expenditure—		Final weight in dollars
	Specific items priced	Other items known to have the same price movement	Other items in the same subgroup	Unallocated items in the entire housefurnishings group	
	(1)	(2)	(3)	(4)	(5)
Furniture:					
Living-room suites.....	\$5.42	\$1.02	\$0.41	\$0.38	\$7.23
Studio couches.....	.97	.35	.09	.08	1.49
Bedroom suites.....	3.25	.95	.27	.24	4.71
Dining-room suites.....	2.05	.78	.18	.17	3.18
Bed springs.....	.52	.45	.06	.06	1.09
Total.....	12.21	3.55	1.01	.93	17.70
Household appliances:					
Vacuum cleaners.....	2.05	0	.25	.13	2.43
Electric refrigerators.....	12.99	0	.61	.80	14.40
Washing machines.....	3.11	0	.38	.19	3.68
Electric light bulbs.....	.71	0	.09	.04	.84
Sewing machines, electric.....	.81	.20	.13	.06	1.20
Refrigerators, gas.....	.45	0	.06	.03	.54
Radios.....	4.24	1.04	.65	.32	6.25
Total.....	24.36	1.24	2.17	1.57	29.34
Textile furnishings:					
Carpets, rugs.....	5.61	0	.13	.31	6.05
Linoleum, inlaid.....	.64	0	.01	.04	.69
Felt-base floor covering.....	.51	0	.01	.03	.55
Mattresses.....	1.66	.09	.04	.10	1.89
Blankets.....	.83	.19	.02	.06	1.10
Sheets.....	1.15	.70	.04	.10	1.99
Towels, cotton.....	.57	.24	.02	.05	.88
Curtain material.....	1.68	.44	.05	.12	2.29
Total.....	12.65	1.66	.32	.81	15.44
Other housefurnishings:					
Stoves.....	4.03	0	0	.22	4.25
Brooms.....	.75	0	0	.04	.79
Dinnerware.....	.65	0	.40	.06	1.11
Glassware.....	.20	0	.12	.02	.34
Total.....	5.63	0	.52	.34	6.49
Grand total.....	54.85	6.45	4.02	3.65	68.97

In addition to relationships between price movements of single items, commodities falling in a subgroup tend to have generally related price movements. Two items falling in the subgroup, electrical equipment, will generally have more closely related price movements than items falling in two different subgroups. In column 3, the ex-

penditures for each such item are allocated proportionately to each priced item, by subgroup.

Finally, there are those items of housefurnishings—window shades, for example—which are not known to resemble in price movement either specific items or subgroups, but which probably are more closely related to the general movement of housefurnishing goods than they are to other groups—for example, food. Expenditures for these items have been allocated proportionately to all priced items in this entire group in column 4. The final weight for each item, shown in column 5, is the sum of the expenditures in columns 1 to 4.

The weights in the original index were derived from the expenditures of white families only. In the new index, the weights in each city in which the Negro population is of importance are a weighted combination of white and Negro expenditures. Moreover, for all those commodities and services generally purchased in different outlets by the two groups, e. g., haircuts, the Bureau is now securing prices in the different outlets patronized by the two groups.

USE OF COST WEIGHTS IN COMPUTING GROUP INDEXES

The figures on actual family expenditures used to compute the weights for each city apply to some year in the period 1934–36, but they do not apply to any one pricing period in that interval. It was necessary, therefore, to compute the cost in March 1935 of the goods purchased in 1 year in the period 1934–36. This cost was obtained by dividing the expenditure weight for each commodity in 1934–36 by its average price in the period covered in the given city and multiplying by the average price in March 1935.

Having thus obtained March 1935 cost figures for each commodity, cost figures for June 1935 are obtained by multiplying the March cost figure by the March to June price relative, obtained in turn by dividing the June price by the March price. By repeating this process for each pricing period and totaling the costs at each period separately for each group, a set of aggregate costs was obtained. Dividing the aggregate for any period by the average value of the aggregate in 1935–39, gives an index for that period with 1935–39 as 100.

COMBINING THE GROUP INDEXES INTO ALL-ITEMS INDEXES FOR EACH CITY

After aggregate costs have been computed for each group index as described above, costs for the six groups of items in a given city for a given pricing period are added to secure costs for all items. The all-items aggregate for a given pricing period is then divided by the average for all items in 1935–39 to secure the indexes. The fact that the weights for the individual goods and services priced for the

six group indexes have been computed in such a way as to represent *all* goods and services classified in each group, automatically provides the basis for combining the six indexes into an aggregate for all items without further weighting. This aggregate represents the cost, at a given date, of goods and services equivalent to those purchased by employed wage earners and clerical workers in a given city in 1934-36.

Table 9 presents for each of the 33 cities the relative importance of each of the six groups of items in the index on the basis of average costs in 1935-39. Because of differences from one city to another in climate, in the economic level of the wage-earner and clerical group, in prices and consumer preferences, the manner in which families apportion their expenditures among different groups of items differs from one city to another. While the same general pattern is preserved from one city to another, certain important differences exist.

The differences in the percent assigned to food can be largely explained on the basis of differences in income. New Orleans families, for example, with a low average income, allocate almost 40 percent of their total expenditure to food, whereas Washington families, with a comparatively high level of income, spend less than 30 percent. In New York, however, where the average money income is relatively high, food prices are high enough to bring the proportion of the total going to food to a percentage distinctly above the average.

For clothing, intercity differences are less than for any other group, the percents all falling between 9 and 12.

In those cities in which rental costs are high relative to the cost of other items, and where a large proportion of the rents include heat as well as shelter, rent tends to claim a higher than average portion of total expenditure. Thus in New York, rent is 21.1 percent of total expenditure; in Chicago, 19.3; in Washington, 21.8; and in Boston, 19.8. For each of these cities rental costs are not only above the national average but are high relative to the cost of other items.¹³ On the other hand, in cities like Manchester, Portland (Oreg.), Indianapolis, and Mobile, where relative rental costs are low, the percentage of total expenditure allotted to rent is less—12.6, 13.2, 14.2, and 12.8, respectively.

Another group of items for which large differences between cities may be expected is that which includes fuel, electricity, and ice. In warm climates the reduction in fuel requirements more than balances the increased need for refrigeration and tends to reduce the percentage of total expenditure allocated to the group. In addition, cities in which apartments are important, and where, therefore, fuel is included in rent, also tend to show low percentages for this group. Thus, Manchester and Portland, Maine, both cities characterized by long,

¹³ See Works Progress Administration, *Intercity Differences in Cost of Living*, March 1935, table 3, p. 162.

cold winters and few apartments, show high percentages of total expenditure for fuel, electricity, and ice—9.4 and 9.3, respectively. New York City, located in a somewhat warmer zone and characterized by a very large number of apartment-house dwellers, shows an extremely low percentage—4.8. On the other hand, Los Angeles, situated in a spot in which the climate eliminates any necessity for central heating, and in which apartment houses are not frequent, shows an even lower percentage—4.1.

TABLE 9.—*Relative Importance of Groups of Items in Computing Changes in Costs of All Items Purchased by Wage Earners and Lower-Salaried Workers*

[Average 1935-39]

City	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
New England:							
Boston.....	100.0	36.7	9.8	19.8	8.8	2.9	22.0
Manchester.....	100.0	36.8	12.0	12.6	9.4	5.2	24.0
Portland, Maine.....	100.0	32.2	10.5	17.2	9.3	4.6	26.2
Middle Atlantic:							
Buffalo.....	100.0	32.5	10.4	17.8	7.7	4.8	26.8
New York.....	100.0	36.2	11.2	21.1	4.8	2.9	23.8
Philadelphia.....	100.0	36.4	10.6	15.8	7.4	4.2	25.6
Pittsburgh.....	100.0	34.1	10.1	19.3	6.2	4.6	25.7
Scranton.....	100.0	37.1	11.3	17.9	7.5	4.7	21.5
East North Central:							
Chicago.....	100.0	35.8	9.1	19.3	6.4	3.2	26.2
Cincinnati.....	100.0	34.5	10.9	16.2	6.1	5.8	26.5
Cleveland.....	100.0	31.6	11.0	16.7	6.7	5.4	28.6
Detroit.....	100.0	31.9	11.0	19.1	6.5	4.4	27.1
Indianapolis.....	100.0	30.2	11.1	14.2	8.1	6.5	29.9
West North Central:							
Kansas City.....	100.0	30.1	10.4	15.2	7.3	5.2	31.8
Minneapolis.....	100.0	30.7	9.9	16.7	8.5	5.1	29.1
St. Louis.....	100.0	33.4	9.7	15.5	6.9	5.0	29.5
South Atlantic:							
Atlanta.....	100.0	31.1	10.8	15.0	6.7	4.9	31.5
Baltimore.....	100.0	35.0	10.4	17.9	7.4	4.8	24.5
Jacksonville.....	100.0	32.1	10.7	14.3	6.1	4.8	32.0
Norfolk.....	100.0	33.2	9.8	14.9	8.2	6.5	27.4
Richmond.....	100.0	30.7	11.2	15.3	7.8	4.6	30.4
Savannah.....	100.0	34.1	10.9	15.0	7.3	5.0	27.7
Washington, D. C.....	100.0	27.8	11.2	21.8	4.8	4.3	30.1
East South Central:							
Birmingham.....	100.0	31.6	11.5	14.8	6.2	5.1	30.8
Memphis.....	100.0	30.8	10.6	15.4	7.8	6.2	29.2
Mobile.....	100.0	33.1	11.4	12.8	6.8	5.4	30.5
West South Central:							
Houston.....	100.0	29.0	10.6	15.4	5.2	6.7	33.1
New Orleans.....	100.0	38.9	10.1	15.6	6.1	3.8	25.5
Mountain:							
Denver.....	100.0	32.9	10.3	16.3	6.2	3.9	30.4
Pacific:							
Los Angeles.....	100.0	31.7	10.8	16.2	4.1	4.8	32.4
Portland, Oreg.....	100.0	31.8	10.6	13.2	6.2	5.0	33.2
San Francisco.....	100.0	33.5	11.2	16.6	3.8	3.7	31.2
Seattle.....	100.0	33.1	10.0	14.7	6.6	4.0	31.6

Another group of items for which intercity differences are affected by the frequency of apartment houses is housefurnishings. The apartment, with its restricted living space, offers little opportunity for the acquisition of items like washing machines, and frequently eliminates the necessity of purchasing such items as refrigerators and stoves. The low percentages in Boston and New York—2.9—are in contrast to the proportions in cities like Houston, Indianapolis, Memphis, and

Norfolk, where the percentage of apartment-house dwellers is small, and where over 6 percent is spent on this group.

Expenditures for miscellaneous items, a large portion of which is allocated to automobile purchases and operation, are influenced by the general community situation as regards automobile ownership. In Southern and Pacific cities, where automobile ownership is common, the percentage of total expenditure for miscellaneous items is high. In large Eastern cities, where automobile ownership is more expensive and more easily dispensed with, the percentage is low. On the other hand, expenditures for this group become more important as income increases, so that in a Pacific city where wage earners and clerical workers' incomes are somewhat above the average for the United States as a whole, and economies in fuel are possible (like Los Angeles), miscellaneous expenditures form almost one-third of total expenditures; whereas in a relatively cold Eastern city (like Scranton), where the incomes of wage earners and clerical workers are below the average for the country, the group expenditure is little more than one-fifth of the total.

COMBINING CITY INDEXES INTO AN INDEX FOR 33 CITIES

Since 1935, the Bureau's indexes for 32 large cities combined have been computed so that the cost figure for each city was given a weight based upon the population of the given metropolitan area and that of other cities in the same region and size class. These weights were derived from the average 1920-30 population of all metropolitan areas and all cities over 50,000 population not included in metropolitan areas.¹⁴ Because the base of the new index represents costs in 1935-39, the population weights used in combining the new city indexes are based on population data for 1930. This changes somewhat the relative importance of certain cities in the all-cities average, although the changes are not large. The largest weight change is that for Portland (Maine), occasioned by the addition of Manchester to the cities included in the index. In the original index the weight for Manchester was assigned to Portland. The population weights for the new index were computed by the method described in the September 1935 Monthly Labor Review.

There is some interest in the relative importance of each group of items after the city aggregates have been weighted together to secure indexes representing costs in the 33 cities combined. When this combination has been made average costs in 1935-39 are divided as follows:

	Percent		Percent
Food.....	33.9	Fuel, electricity, and ice.....	6.4
Clothing.....	10.5	Housefurnishings.....	4.2
Rent.....	18.1	Miscellaneous.....	26.9

¹⁴ See Monthly Labor Review, September 1935 (pp. 828-830).

The nature of the differences between the group weights of the original index and the group weights of the new index are the more readily understood when the distribution of the total money disbursements of the wage earners and clerical workers studied in 1917-19 and in 1934-36 are compared. Table 10 gives the percentage distribution of the actual disbursements, including savings, as of the date when the figures were originally collected, and in terms of average costs in 1935-39. This table shows that, when money disbursements of the two periods are thus converted to the same dollar values, the proportions for food, rent, and miscellaneous items is greater in the later period, those for fuel, electricity, and ice, and for housefurnishings about the same, while those for clothing are somewhat lower, and for savings considerably lower.¹⁵

TABLE 10.—*Money Disbursements of Wage-Earner and Lower-Salaried Groups Studied in 1917-19 and 1934-36*

Item	Percentage distribution of—			
	Actual disbursements		Estimated cost in 1935-39 of goods purchased in—	
	1917-19	1934-36	1917-19	1934-39
Food.....	37.5	34.0	29.6	33.6
Clothing.....	15.5	10.3	13.1	10.4
Rent.....	13.6	17.5	15.3	18.0
Fuel, electricity, and ice.....	4.8	6.7	6.1	6.4
Housefurnishings.....	4.4	4.0	4.5	4.2
Miscellaneous.....	17.0	26.8	23.2	26.7
Insurance.....	2.6		3.6	
Other savings.....	4.6	.7	4.6	.7
Total disbursements.....	100.0	100.0	100.0	100.0

The relative importance of the six groups of items used in calculating changes in the cost of goods purchased by wage earners and clerical workers changes from time to time, because the prices in the different groups change at different rates. Prices of items included in the miscellaneous group are much more stable than those for items in the other groups; food prices change more rapidly than rents, and so on.

Table 11 presents the relative importance of each group index in the computation of costs in the original index in 1923-25 and in 1935-39, and in the new index in 1935-39.

¹⁵ The difference in the savings item is probably accounted for in part by the difference in the national situation at the time the two studies of money disbursements were made. The period of the earlier study had been preceded by 2 years of full employment, and U. S. Government "liberty loans" were being floated in small denominations appealing to moderate-income families. There was great incentive toward saving. The period of the 1934-36 study had been preceded by 4 years of serious unemployment. Many of the employed families covered by the investigation made at this time were making up for arrears in purchasing, which had accumulated in the years just previous. Installment-credit facilities had been increased, and borrowing to purchase consumers' goods was easier than it had been at the end of the last war. There is considerable evidence which shows that the standard of living of the wage-earner and clerical group was higher in 1934-36, in the sense that they were more conscious of the food and housing facilities necessary for good health than they had been earlier.

Differences between the percentage distribution of costs according to the original index in 1935-39 and the new index in 1935-39 are due to the changes in consumption patterns shown in table 10. Quantities of foods purchased have increased; houses with better facilities are now obtained and more is spent for housing. The emphasis on clothing expenditure has declined. The weight on miscellaneous items in the original index as shown in table 11 is larger than would have been expected from table 10, because in the original index the cost of insurance was assumed to move with the cost of miscellaneous goods and services, and the weight for the miscellaneous-items group index included amounts spent for insurance premiums. In the 1934-36 study, amounts spent for insurance premiums were treated as savings.¹⁶ Savings are excluded from the computation of both indexes.

TABLE 11.—*Relative Importance of Each Group of Items in Computing Changes in Costs of All Items Purchased by Wage Earners and Lower-Salaried Workers*

Item	Original index		New index: 1935-39
	1923-25	1935-39 ¹	
Food.....	31.6	31.1	33.9
Clothing.....	14.1	13.8	10.5
Rent.....	19.8	16.0	18.1
Fuel, electricity, and ice.....	6.0	6.3	6.4
Housefurnishings.....	4.8	4.7	4.2
Miscellaneous.....	23.7	28.1	26.9
All items.....	100.0	100.0	100.0

¹ The percentage distribution for all weights shown here is higher than in column 3 of table 10, since savings other than life insurance were not included in the base on which the percentages were calculated.

Comparison of New and Original Indexes

Despite the large changes in the internal composition of the index resulting from the revision, the differences between the movement of the new and original indexes over the period for which both indexes were computed, March 1935 to December 1939, are not large. Charts 2 and 3 present this comparison for each of the major groups of items and for all items combined. The general pattern of change in the cost of all items, little change during 1935, a sharp increase from the spring of 1936 to the fall of 1937, with a subsequent decline to levels in 1939 still somewhat above those prevailing in 1935, is shown by both indexes. The maximum discrepancy between the two

¹⁶ It is clear that expenditure on life insurance is only part savings, the other part being current expenditure. That part of life insurance which furnishes protection only, sometimes purchased as term insurance, is solely current expenditure; it is only the remainder which can be considered savings. The impossibility of separating that part of any actual premium which goes for actual protection from that part which is savings, led to the decision to treat the entire expenditure as savings.

indexes at any period is slightly more than 1 index point. In general the new index seems to be somewhat more sensitive to price change than is the original.

The different groups of items show different amounts of agreement. For rent, the two indexes are virtually identical, the maximum discrepancy being 0.3. For clothing, the agreement is close, although the new index appears more sensitive. The maximum discrepancy is again less than 1 index point. The magnitude of the changes made by the revision of the housefurnishings index results in somewhat less agreement between the indexes for this group, the maximum discrepancy being 1.6 index points. This difference is largely due to a decline in the prices of certain articles of electrical equipment over the period. Nevertheless, even for this index, the general pattern of change during this period is the same in both indexes.

For food, the lowered weight for potatoes and apples and the increased weight for oranges, all foods given to large month-to-month fluctuations, account for the occasional disagreements in short-period fluctuations. The lowered weight on coal in the fuel, electricity, and ice index has diminished the amplitude of the seasonal fluctuations of the original index, but the trend of the two indexes over the period is the same. The inclusion of automobile purchase and operation in the miscellaneous index has served to increase materially the sensitivity of the index for this group. Despite some differences in movement between the two indexes, the maximum discrepancy is slightly more than 1 index point.

The general closeness of the agreement between the two sets of indexes over the period 1935-39 is a strong indication of the usefulness of the original group indexes for periods prior to 1935.

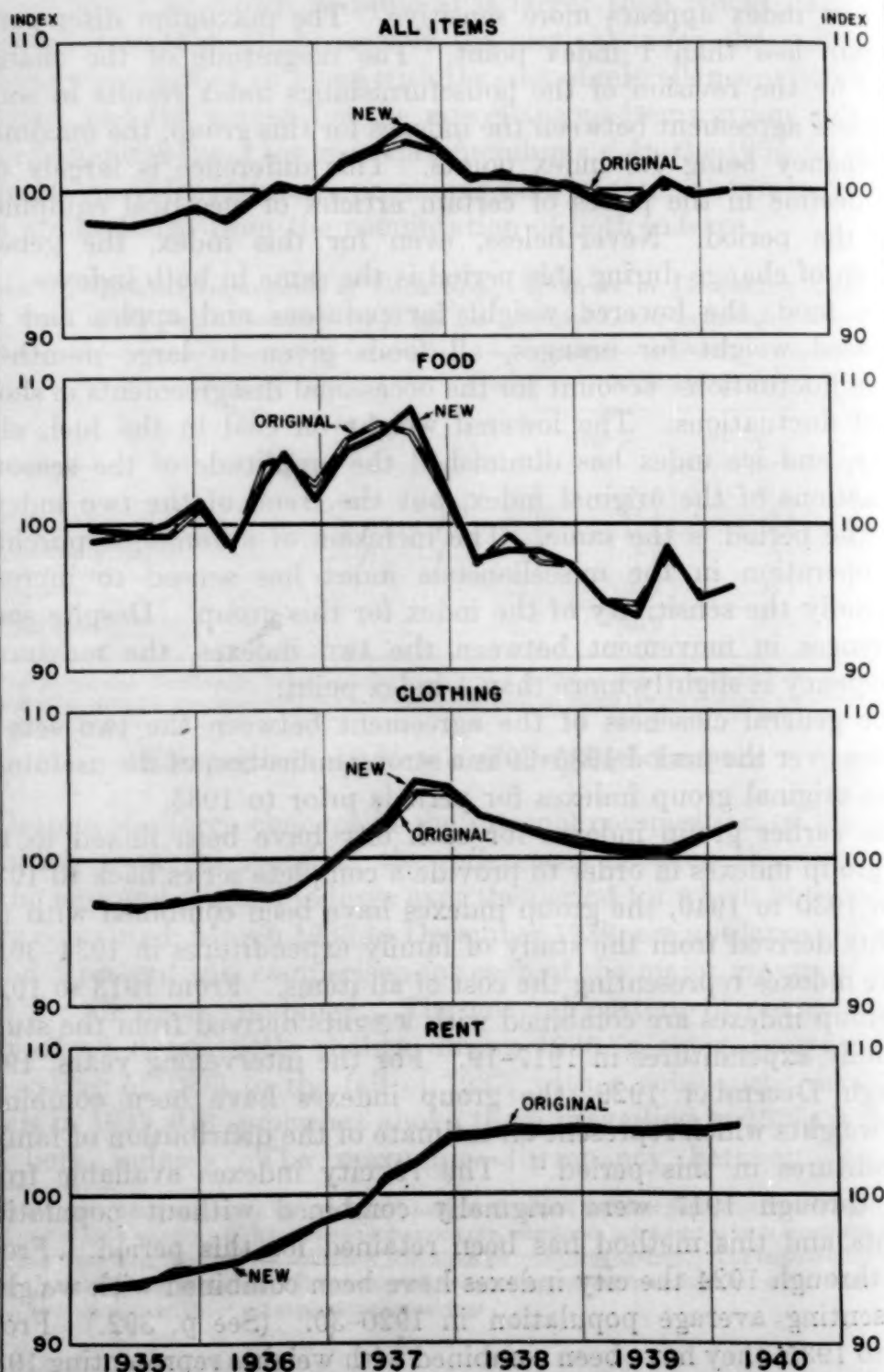
The earlier group indexes for each city have been linked to the new group indexes in order to provide a complete series back to 1913. From 1930 to 1940, the group indexes have been combined with the weights derived from the study of family expenditures in 1934-36 to secure indexes representing the cost of all items. From 1913 to 1925, the group indexes are combined with weights derived from the study of family expenditures in 1917-19. For the intervening years, 1925 through December 1929, the group indexes have been combined with weights which represent an estimate of the distribution of family expenditures in this period.¹⁷ The 19 city indexes available from 1913 through 1917 were originally combined without population weights and this method has been retained for this period. From 1918 through 1924 the city indexes have been combined with weights representing average population in 1920-30. (See p. 392.) From 1930 to 1935, they have been combined with weights representing 1930

¹⁷ This was done by averaging the new and original group weights for the period 1925-29.

CHART 2

INDEX NUMBERS OF COSTS OF GOODS PURCHASED BY WAGE-EARNERS AND SALARIED WORKERS IN LARGE CITIES, 1935-40

1935-39=100

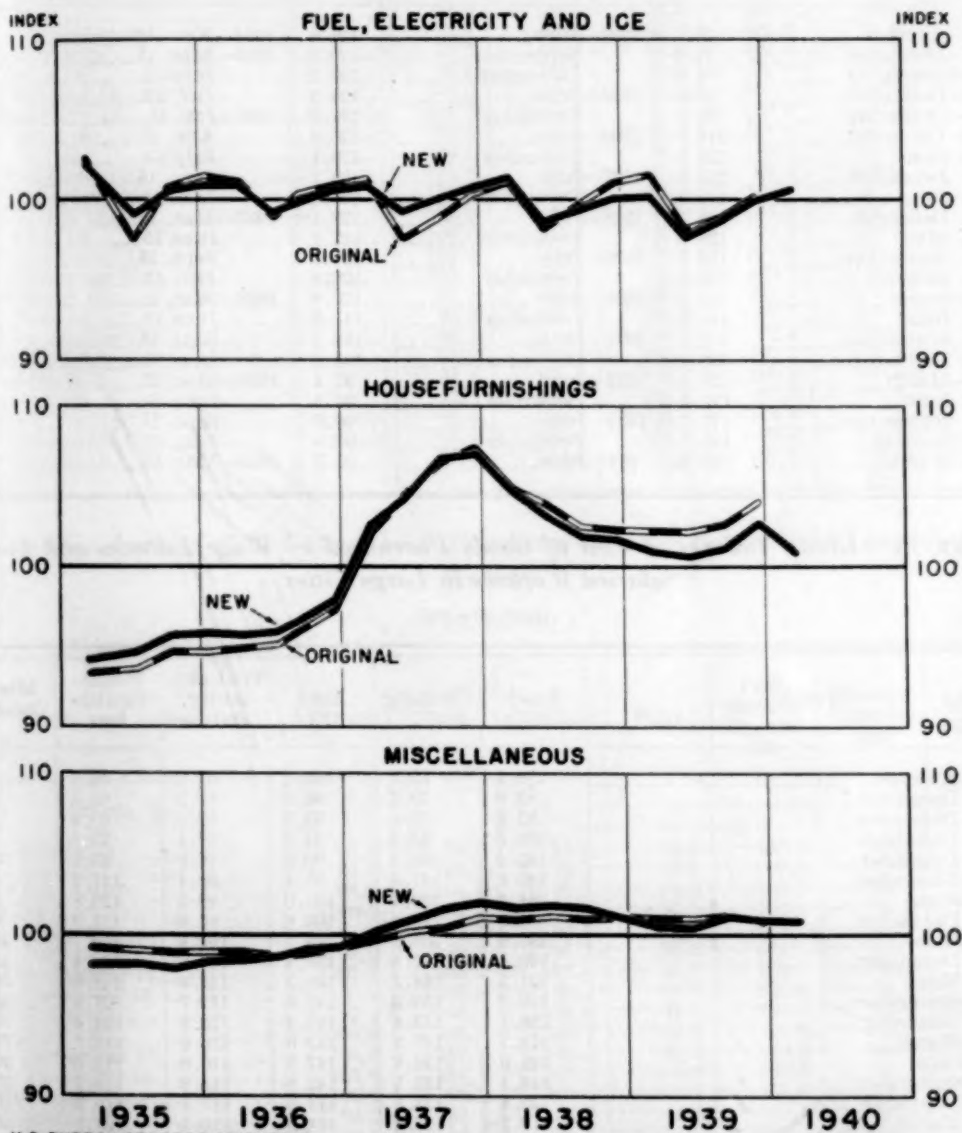


U.S. BUREAU OF LABOR STATISTICS

CHART 3

INDEX NUMBERS OF COSTS OF GOODS PURCHASED
BY WAGE-EARNERS AND SALARIED WORKERS
IN LARGE CITIES, 1935-40

1935-39=100



U. S. BUREAU OF LABOR STATISTICS

population. (See table 12 for the new index for the 33 large cities combined back to 1913.)

Table 13 presents group indexes on the 1935-39 base from March 1940 back to 1913. From March 1940 to March 1935, the figures presented are the new indexes. At the beginning of 1935, they are linked to the original indexes for earlier pricing periods.

TABLE 12.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in Large Cities*

[1935-39=100]

Period	Indexes	Period	Indexes	Period	Indexes
1913—Average	70.7	1924—June	121.8	1934—Nov. 15	96.2
1914—December	72.6	September	122.2	1935—Mar. 15	97.8
1915—December	74.0	December	123.2	July 15	97.6
1916—December	82.4	1925—June	124.9	Oct. 15	98.0
1917—December	97.8	December	128.2	1936—Jan. 15	98.8
1918—December	118.0	1926—June	126.4	Apr. 15	97.8
1919—June	121.0	December	126.1	July 15	99.4
December	135.3	1927—June	125.7	Sept. 15	100.4
1920—June	149.4	December	123.8	Dec. 15	99.8
December	138.3	1928—June	122.1	1937—Mar. 15	101.8
1921—May	126.6	December	122.4	June 15	102.8
September	125.3	1929—June	122.1	Sept. 15	104.3
December	123.6	December	122.8	Dec. 15	103.0
1922—March	119.3	1930—June	120.3	1938—Mar. 15	100.9
June	119.5	December	115.3	June 15	100.9
September	118.7	1931—June	108.2	Sept. 15	100.7
December	120.4	December	104.2	Dec. 15	100.2
1923—March	120.2	1932—June	97.4	1939—Mar. 15	99.1
June	121.6	December	93.5	June 15	98.6
September	123.1	1933—June	90.8	Sept. 15	100.6
December	123.5	December	93.9	Dec. 15	99.6
1924—March	122.0	1934—June	95.3	1940—Mar. 15	99.8

TABLE 13.—*Group Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in Large Cities*

[1935-39=100]

Period	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1913—Average	79.9	69.3	92.2	61.9	59.1	50.9
1914—December	83.9	70.0	92.2	62.5	61.5	52.4
1915—December	83.9	72.6	93.6	62.5	65.4	54.6
1916—December	100.6	83.2	94.3	67.1	75.5	57.6
1917—December	125.4	103.3	92.3	76.8	89.0	71.5
1918—December	149.6	147.9	97.1	90.4	121.2	83.1
1919—June	148.5	160.1	101.0	89.3	128.8	85.5
December	160.0	198.4	109.6	94.8	152.3	94.3
1920—June	185.0	209.7	119.1	104.8	169.7	100.7
December	146.4	187.8	131.4	119.0	164.4	104.7
1921—May	121.2	161.5	139.2	112.9	141.6	104.7
September	129.2	139.5	140.0	112.7	127.8	104.0
December	126.1	133.4	142.3	113.8	124.4	103.5
1922—March	118.3	127.3	142.0	110.5	117.7	101.8
June	121.0	124.9	142.5	110.0	115.5	100.9
September	118.1	123.5	142.8	115.8	115.7	100.7
December	122.4	123.6	143.8	117.3	119.3	100.4
1923—March	119.7	125.4	144.5	116.5	124.7	100.5
June	123.7	125.7	146.0	113.2	127.4	100.5
September	126.6	126.7	147.4	114.5	127.5	101.1
December	126.0	126.7	149.6	116.0	127.4	101.5
1924—March	121.3	126.3	150.4	114.7	126.5	101.2
June	121.5	125.1	152.0	112.0	123.1	101.3
September	123.1	123.8	152.2	113.5	122.1	101.3
December	125.9	123.0	152.6	114.2	122.7	101.7
1925—June	131.9	122.6	152.2	112.4	121.3	102.3
December	140.6	121.8	152.0	121.3	121.1	102.6
1926—June	137.8	120.7	150.6	114.7	118.6	102.5
December	136.8	119.6	150.0	118.6	117.3	102.8
1927—June	137.5	118.5	148.4	114.1	115.7	103.1
December	132.5	116.9	146.9	115.4	115.2	103.6

TABLE 13.—Group Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in Large Cities—Continued

Period	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
1928—June.....	129.7	116.7	144.8	112.0	112.8	103.6
December.....	130.6	116.0	143.3	114.3	112.1	104.3
1929—June.....	131.3	115.4	141.4	111.1	111.7	104.5
December.....	133.8	114.7	139.9	113.6	111.3	104.9
1930—June.....	128.1	113.8	138.0	109.9	109.9	105.2
December.....	116.5	109.4	135.1	112.4	105.4	104.9
1931—June.....	102.1	103.5	130.9	107.3	98.1	104.3
December.....	96.5	96.3	125.8	109.1	92.6	103.3
1932—June.....	85.7	91.1	117.8	101.6	84.8	101.8
December.....	82.0	86.2	109.0	102.5	81.3	100.2
1933—June.....	82.2	84.8	100.1	97.2	81.5	97.8
December.....	88.1	94.4	95.8	102.9	91.1	98.1
1934—June.....	93.0	96.6	94.0	100.3	92.9	97.9
November 15.....	95.4	96.5	93.9	101.8	93.6	97.8
1935—March 15.....	99.7	96.8	93.8	102.1	94.2	98.1
July 15.....	99.4	96.7	94.1	99.0	94.5	98.2
October 15.....	100.0	96.9	94.6	100.5	95.7	97.9
1936—January 15.....	101.5	97.3	95.1	100.8	95.8	98.2
April 15.....	98.4	97.4	95.5	100.8	95.7	98.4
July 15.....	102.6	97.2	96.5	99.1	95.9	98.7
September 15.....	104.8	97.5	97.1	99.9	96.6	99.0
December 15.....	101.6	99.0	98.1	100.5	97.9	99.1
1937—March 15.....	105.0	100.9	98.9	100.8	102.6	100.2
June 15.....	106.0	102.5	101.0	99.2	104.3	100.9
September 15.....	107.9	105.1	102.1	100.0	106.7	101.7
December 15.....	102.7	104.8	103.7	100.7	107.0	102.0
1938—March 15.....	97.5	102.9	103.9	101.2	104.7	101.6
June 15.....	98.2	102.2	104.2	98.6	103.1	101.8
September 15.....	98.1	101.4	104.2	99.3	101.9	101.6
December 15.....	97.2	100.9	104.3	100.0	101.7	101.0
1939—March 15.....	94.6	100.4	104.3	100.1	100.9	100.5
June 15.....	93.6	100.3	104.3	97.5	100.6	100.4
September 15.....	98.4	100.3	104.4	98.6	101.1	101.1
December 15.....	94.9	101.3	104.4	99.9	102.7	100.9
1940—March 15.....	95.6	102.0	104.5	100.6	100.5	100.8

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers

[1935-39=100]

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Atlanta, Ga.</i>							
1935—March 15.....	97.5	99.5	95.8	93.4	101.2	97.5	97.3
July 15.....	97.6	100.1	96.3	93.6	97.6	97.8	97.5
October 15.....	99.8	104.8	96.3	94.6	100.5	99.5	98.4
1936—January 15.....	100.3	104.4	96.8	95.5	102.9	99.2	99.4
April 15.....	98.3	97.8	97.1	95.7	103.1	99.9	99.1
July 15.....	99.9	103.7	97.5	96.2	97.9	99.1	99.3
September 15.....	101.1	105.7	97.8	97.6	100.7	99.2	99.7
December 15.....	100.9	103.8	99.9	98.3	103.0	99.1	99.5
1937—March 15.....	102.2	106.4	101.9	99.1	100.7	103.0	99.9
June 15.....	102.8	106.3	102.7	100.6	96.5	104.3	101.7
September 15.....	104.3	107.7	105.5	103.2	99.6	106.5	101.8
December 15.....	102.6	101.4	105.9	103.9	101.9	104.5	102.0
1938—March 15.....	100.1	94.7	103.6	104.2	101.8	101.9	101.5
June 15.....	99.2	94.5	103.0	104.4	95.4	98.3	100.9
September 15.....	100.0	96.5	101.6	104.2	98.4	97.7	101.6
December 15.....	100.0	96.5	100.4	104.1	101.2	98.3	101.3
1939—March 15.....	98.8	94.5	99.7	104.1	101.1	98.1	99.9
June 15.....	98.0	92.7	99.5	104.0	95.1	98.1	100.5
September 15.....	100.1	98.3	100.0	103.9	98.6	99.5	100.5
December 15.....	98.7	93.6	100.5	104.1	101.2	100.0	99.8
1940—March 15.....	99.5	96.0	102.0	104.1	100.7	97.1	100.1

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Baltimore, Md.</i>							
1935—March 15.....	98.1	98.6	97.9	95.2	104.2	93.8	98.6
July 15.....	98.4	100.7	98.0	95.2	97.7	93.8	98.7
October 15.....	98.9	99.8	98.1	96.8	103.8	94.5	98.9
1936—January 15.....	99.8	100.8	98.3	97.2	103.9	97.1	100.0
April 15.....	99.1	98.8	98.2	96.9	104.0	97.3	100.4
July 15.....	99.7	101.9	98.1	97.1	98.8	97.2	100.0
September 15.....	100.0	103.6	98.3	97.8	101.1	97.5	99.8
December 15.....	99.7	100.3	98.7	99.3	101.3	97.7	99.4
1937—March 15.....	101.4	104.2	99.4	99.5	100.6	100.4	99.9
June 15.....	101.7	104.9	102.0	100.4	96.1	101.2	99.9
September 15.....	102.9	105.8	103.4	101.3	98.2	106.2	100.6
December 15.....	101.9	102.1	103.7	102.3	98.4	106.7	100.8
1938—March 15.....	100.3	98.2	101.7	102.7	98.8	105.4	100.5
June 15.....	100.3	98.6	101.4	102.8	98.1	104.3	99.8
September 15.....	100.1	98.5	100.4	102.9	99.5	103.6	99.8
December 15.....	100.0	97.8	100.3	102.9	100.0	102.0	100.3
1939—March 15.....	99.6	96.5	100.5	103.1	100.0	100.8	100.8
June 15.....	99.2	96.1	100.5	103.2	96.5	100.8	100.7
September 15.....	100.5	99.4	100.7	103.2	97.8	101.3	100.9
December 15.....	98.9	94.6	101.7	103.6	96.8	102.7	100.4
1940—March 15.....	99.7	96.6	101.7	103.6	98.2	101.4	100.6
<i>Birmingham, Ala.</i>							
1935—March 15.....	96.0	99.0	95.3	82.0	103.9	95.9	98.4
July 15.....	97.0	102.5	95.4	82.2	100.8	95.5	98.6
October 15.....	98.3	104.3	95.3	85.8	102.8	95.8	98.9
1936—January 15.....	98.0	101.3	96.4	87.0	102.9	97.0	99.5
April 15.....	96.1	96.3	96.7	88.0	99.8	96.9	98.7
July 15.....	99.0	105.2	96.3	89.2	100.8	96.5	98.4
September 15.....	100.2	107.8	96.8	90.2	101.1	97.4	98.9
December 15.....	100.9	106.3	97.2	95.8	101.5	98.2	99.4
1937—March 15.....	103.2	109.1	101.3	98.7	102.6	103.9	100.1
June 15.....	104.0	109.8	103.9	101.6	99.9	104.7	99.9
September 15.....	104.9	109.3	106.6	103.6	100.8	105.7	101.1
December 15.....	104.1	102.1	105.7	112.7	102.1	104.2	101.8
1938—March 15.....	101.5	95.3	104.1	113.3	101.4	102.6	101.0
June 15.....	100.7	94.5	103.6	112.8	96.7	101.7	100.9
September 15.....	101.2	96.0	102.7	112.2	99.8	100.9	101.2
December 15.....	100.4	94.7	101.3	111.9	100.1	100.6	100.4
1939—March 15.....	99.1	90.9	100.8	111.6	100.1	100.4	100.6
June 15.....	98.2	89.4	100.7	111.4	92.8	100.4	100.7
September 15.....	100.3	95.4	100.5	111.3	93.1	101.8	101.1
December 15.....	99.5	93.0	101.7	111.5	91.9	101.7	100.8
1940—March.....	99.3	92.0	102.7	112.3	94.1	98.5	100.6
<i>Boston, Mass.</i>							
1935—March 15.....	100.3	101.6	97.7	100.0	100.8	95.9	99.9
July 15.....	99.0	99.9	97.3	99.8	95.8	96.0	99.1
October 15.....	99.2	100.1	97.9	99.7	96.1	97.5	99.5
1936—January 15.....	100.1	101.5	98.9	99.8	97.8	96.8	99.8
April 15.....	99.6	100.3	98.7	99.7	99.1	95.6	99.6
July 15.....	100.8	104.2	98.6	99.6	97.4	95.6	99.3
September 15.....	100.3	102.6	98.6	99.7	97.9	96.2	99.4
December 15.....	99.3	99.4	99.0	99.8	98.7	98.2	99.2
1937—March 15.....	101.5	102.8	100.6	99.8	102.1	102.7	100.9
June 15.....	102.6	105.1	101.8	99.8	101.6	104.1	101.4
September 15.....	104.8	109.9	104.5	100.0	102.2	106.5	101.7
December 15.....	102.2	102.6	104.0	100.3	103.7	106.6	101.1
1938—March 15.....	99.8	96.9	102.5	100.4	103.9	104.1	100.9
June 15.....	99.8	98.2	101.9	100.3	100.7	103.7	100.4
September 15.....	99.8	98.9	100.9	100.2	100.1	101.0	100.2
December 15.....	98.8	96.4	99.9	100.2	101.0	101.2	99.7
1939—March 15.....	98.1	95.3	99.3	100.2	100.2	99.9	99.1
June 15.....	97.4	94.4	99.4	100.1	96.9	99.9	98.9
September 15.....	99.3	98.1	99.1	100.2	100.6	99.1	100.2
December 15.....	97.9	92.8	100.6	100.3	104.4	100.9	99.9
1940—March 15.....	99.2	95.9	101.1	100.4	106.7	97.9	100.1

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Buffalo, N. Y.</i>							
1935—March 15.....	96.9	98.9	97.2	91.4	103.3	95.1	96.4
July 15.....	97.7	100.7	97.2	91.4	100.7	95.0	98.2
October 15.....	97.2	100.3	97.1	91.8	103.6	95.6	95.6
1936—January 15.....	98.0	101.8	98.0	92.7	103.6	95.1	95.8
April 15.....	98.1	99.1	98.2	93.7	102.2	93.3	99.4
July 15.....	100.0	104.6	97.8	96.0	101.1	93.6	98.7
September 15.....	100.0	102.9	98.2	96.4	102.0	94.5	99.9
December 15.....	99.9	101.0	99.2	97.1	102.8	97.1	100.4
1937—March 15.....	101.7	104.0	100.9	97.7	102.8	103.3	101.2
June 15.....	103.9	106.5	102.4	103.0	98.3	106.8	102.9
September 15.....	104.5	105.9	105.0	104.0	99.3	109.0	103.7
December 15.....	103.6	102.5	105.2	105.4	100.2	109.3	103.2
1938—March 15.....	101.3	97.9	101.2	105.6	99.2	104.5	102.5
June 15.....	100.6	97.0	100.5	105.6	96.3	103.0	102.6
September 15.....	100.1	96.4	100.3	105.6	97.0	102.0	101.5
December 15.....	100.4	98.0	100.6	105.8	97.8	102.3	100.1
1939—March 15.....	99.3	95.5	100.7	105.7	98.3	101.3	99.1
June 15.....	98.6	94.8	100.4	105.9	95.8	100.1	98.1
September 15.....	101.1	100.0	100.2	105.9	95.8	99.4	101.5
December 15.....	99.7	94.3	101.1	105.8	98.4	101.7	101.8
1940—March 15.....	100.5	96.6	101.0	105.8	99.2	100.2	101.9
<i>Chicago, Ill.</i>							
1935—March 15.....	97.1	100.2	97.5	91.1	99.2	92.7	97.3
July 15.....	97.3	100.2	98.0	91.3	98.4	93.5	97.8
October 15.....	97.2	99.7	98.0	91.5	99.0	95.1	97.6
1936—January 15.....	97.7	100.9	98.3	92.1	97.6	95.4	97.6
April 15.....	96.9	97.9	98.4	92.4	99.3	95.1	98.1
July 15.....	98.7	102.0	98.3	94.1	96.9	95.1	98.6
September 15.....	100.5	106.0	99.3	94.4	98.0	96.5	98.9
December 15.....	99.5	101.8	100.2	95.2	99.1	98.0	99.4
1937—March 15.....	101.3	104.9	101.5	95.5	100.1	101.2	100.7
June 15.....	103.6	107.3	102.6	100.6	98.4	104.1	102.4
September 15.....	105.1	109.6	105.4	101.3	99.9	107.3	102.7
December 15.....	103.3	102.9	104.8	104.2	100.6	107.8	102.7
1938—March 15.....	101.1	97.3	101.8	104.7	103.4	104.6	102.5
June 15.....	102.2	99.2	101.0	108.0	100.8	103.0	102.6
September 15.....	102.1	99.0	100.2	108.2	102.0	102.1	102.6
December 15.....	100.8	96.3	99.6	108.5	103.2	102.2	100.9
1939—March 15.....	99.4	93.5	99.0	108.5	103.3	102.1	99.7
June 15.....	98.9	93.1	99.0	108.4	98.7	102.4	99.6
September 15.....	100.7	97.4	98.9	108.4	100.3	103.2	100.1
December 15.....	99.8	94.6	99.5	108.5	102.6	103.3	99.7
1940—March 15.....	99.7	94.2	99.9	108.5	102.8	101.5	99.7
<i>Cincinnati, Ohio</i>							
1935—March 15.....	98.6	101.5	94.4	96.5	105.3	92.6	97.4
July 15.....	98.5	102.4	94.3	96.5	96.5	92.2	98.1
October 15.....	99.0	103.4	94.0	96.6	99.3	93.2	98.1
1936—January 15.....	99.6	103.9	94.8	96.8	102.3	92.6	98.6
April 15.....	98.2	99.9	95.2	96.9	100.1	93.3	98.7
July 15.....	100.6	106.0	95.1	97.1	99.9	95.5	99.2
September 15.....	101.7	108.8	95.2	97.5	99.2	96.1	99.3
December 15.....	99.9	101.4	98.5	99.0	100.7	98.1	99.1
1937—March 15.....	102.7	106.4	101.3	99.7	103.3	104.1	100.0
June 15.....	103.1	107.0	102.7	100.3	99.4	105.4	100.3
September 15.....	104.4	107.4	107.3	101.5	98.7	107.8	101.6
December 15.....	102.9	101.7	107.2	102.2	101.4	108.1	102.3
1938—March 15.....	100.6	96.0	104.9	102.9	101.4	107.4	101.7
June 15.....	100.5	97.3	103.7	103.1	98.1	103.8	101.6
September 15.....	100.3	96.9	103.1	103.2	99.6	102.3	101.6
December 15.....	99.1	94.1	102.8	103.0	99.3	103.0	100.9
1939—March 15.....	98.2	92.0	102.2	102.5	99.3	102.3	100.7
June 15.....	97.3	90.3	102.1	102.4	96.3	101.3	100.6
September 15.....	99.4	95.4	102.2	102.3	98.4	102.3	101.1
December 15.....	98.2	91.7	102.8	102.1	99.7	104.0	100.8
1940—March 15.....	98.4	92.6	103.9	102.2	99.7	100.7	100.4

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Cleveland, Ohio</i>							
1935—March	96.9	99.6	96.6	90.6	97.6	96.0	97.8
July 15	97.0	99.7	96.0	90.8	96.0	95.5	98.3
October 15	97.4	100.2	96.9	91.2	97.1	95.9	98.5
1936—January 15	97.2	99.4	96.8	91.3	97.6	96.4	98.4
April 15	96.8	97.5	97.3	91.6	98.7	95.1	98.6
July 15	98.6	102.5	97.3	92.3	97.4	96.9	99.0
September 15	100.0	105.6	97.8	94.4	97.6	96.8	99.2
December 15	98.4	99.2	98.8	95.3	98.7	97.9	99.2
1937—March 15	100.5	102.4	101.6	96.3	98.6	102.9	100.5
June 15	102.8	106.0	102.4	101.9	97.1	105.6	100.7
September 15	104.3	107.2	106.1	104.6	98.5	107.7	101.0
December 15	102.9	100.6	105.0	107.4	98.5	107.8	102.0
1938—March 15	101.1	97.3	102.4	107.4	99.6	102.3	101.4
June 15	101.8	99.7	102.0	107.1	98.0	102.0	101.7
September 15	101.9	100.1	101.5	107.1	99.3	101.2	101.7
December 15	101.4	99.4	101.3	107.1	99.6	100.8	101.0
1939—March 15	101.0	96.5	100.5	107.1	109.1	100.0	100.9
June 15	100.8	96.1	100.3	107.4	107.4	100.3	100.9
September 15	101.7	98.9	100.5	107.7	108.6	99.8	100.6
December 15	100.9	95.7	101.5	107.6	109.6	102.0	100.3
1940—March 15	100.7	95.9	102.0	107.6	109.5	100.9	99.2
<i>Denver, Colo.</i>							
1935—March 15	97.2	99.6	99.2	89.8	99.4	93.6	97.7
July 15	96.8	98.8	99.1	90.4	99.3	94.1	97.1
October 15	97.2	99.6	98.3	91.5	98.5	95.2	97.3
1936—January 15	97.9	100.3	98.8	92.3	99.0	96.1	98.1
April 15	97.1	98.0	98.4	92.9	100.0	97.2	97.5
July 15	99.6	103.2	97.7	94.8	99.2	96.5	99.2
September 15	100.5	104.5	98.3	96.6	99.6	96.9	99.5
December 15	99.9	102.4	98.7	98.2	100.1	97.3	99.0
1937—March 15	102.8	107.6	100.5	99.6	100.6	100.8	100.8
June 15	103.5	106.7	102.3	102.6	101.6	103.1	101.5
September 15	105.1	107.2	105.3	104.1	101.8	106.0	103.9
December 15	103.3	102.6	104.5	105.5	101.9	106.4	102.4
1938—March 15	101.0	97.6	102.8	105.7	102.2	105.2	100.9
June 15	101.0	98.0	101.8	105.7	101.9	102.8	100.9
September 15	100.2	95.5	100.0	106.0	101.6	102.7	101.6
December 15	99.9	95.9	98.7	106.0	101.6	101.9	100.9
1939—March 15	99.2	94.1	98.7	106.1	97.8	101.5	101.2
June 15	99.2	94.5	98.7	106.4	97.7	101.5	100.6
September 15	99.7	95.7	98.8	106.6	97.6	102.2	100.9
December 15	99.7	95.0	99.6	106.8	97.8	103.7	100.8
1940—March 15	98.7	93.9	100.0	106.7	97.8	101.5	98.9
<i>Detroit, Mich.</i>							
1935—March 15	94.2	98.6	96.5	77.8	102.5	93.8	97.5
July 15	94.9	99.6	96.2	80.5	101.0	94.3	97.7
October 15	95.5	99.4	96.2	85.0	104.7	94.7	95.9
1936—January 15	96.5	101.0	97.1	86.9	104.1	95.4	96.0
April 15	96.4	98.2	97.0	89.3	103.7	96.0	97.3
July 15	99.2	104.0	97.5	93.3	101.6	96.8	98.4
September 15	100.1	105.5	98.3	94.9	101.7	97.2	98.2
December 15	99.5	101.1	98.5	99.8	100.2	97.3	98.1
1937—March 15	102.7	106.1	101.0	101.3	99.7	103.0	101.1
June 15	105.3	109.3	102.4	107.4	97.9	104.4	102.4
September 15	106.1	109.2	104.9	109.3	98.0	105.4	102.9
December 15	106.4	103.8	105.9	114.8	99.8	107.4	105.2
1938—March 15	104.2	99.7	103.3	113.6	100.6	106.2	103.7
June 15	103.0	99.8	102.0	111.2	95.7	102.2	103.2
September 15	101.5	96.7	100.7	109.6	97.3	101.6	102.7
December 15	100.7	96.0	100.9	109.1	98.7	101.2	100.7
1939—March 15	99.8	94.0	100.8	108.4	98.7	101.3	100.2
June 15	99.1	92.4	100.9	108.0	96.5	101.5	100.2
September 15	100.2	96.2	100.1	107.8	97.5	101.3	99.9
December 15	99.8	94.1	101.7	107.8	98.9	102.8	99.8
1940—March 15	99.9	94.5	102.0	107.9	98.8	100.3	99.9

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electric- ity, and ice	House- furnish- ings	Miscel- laneous
<i>Houston, Tex.</i>							
1935—March 15.....	97.6	100.9	97.8	90.5	103.0	90.2	98.6
July 15.....	96.5	97.4	97.5	90.7	102.8	90.0	98.4
October 15.....	97.0	98.9	97.3	92.4	102.9	90.3	97.9
1936—January 15.....	97.8	99.6	97.3	94.0	103.4	91.3	98.6
April 15.....	96.7	95.6	97.5	94.7	102.9	92.3	98.3
July 15.....	98.5	101.0	96.4	95.6	100.4	93.6	99.0
September 15.....	99.5	103.7	96.4	96.8	99.3	94.6	99.1
December 15.....	99.6	102.7	98.3	98.3	99.6	94.7	99.0
1937—March 15.....	101.6	105.1	99.9	99.5	99.6	102.2	100.3
June 15.....	101.5	103.3	101.2	100.6	99.4	104.4	100.2
September 15.....	103.5	105.4	105.0	102.6	99.4	107.8	101.6
December 15.....	103.0	101.4	105.9	103.9	99.8	109.4	102.3
1938—March 15.....	101.7	98.9	103.2	105.0	99.9	106.1	101.6
June 15.....	101.2	97.7	101.9	105.4	99.6	105.9	101.5
September 15.....	101.5	98.6	101.0	105.7	99.4	106.3	101.6
December 15.....	101.4	99.0	100.4	105.7	99.6	105.7	101.2
1939—March 15.....	100.0	95.3	100.6	106.2	99.7	105.2	100.0
June 15.....	100.1	95.7	100.5	106.8	95.2	105.0	100.6
September 15.....	101.6	100.9	100.7	106.7	95.3	105.0	100.6
December 15.....	101.3	98.8	102.1	106.6	95.4	107.1	100.4
1940—March 15.....	100.8	97.7	102.9	106.7	95.7	104.9	100.0
<i>Indianapolis, Ind.</i>							
1935—March 15.....	97.1	98.2	95.9	89.5	103.9	93.5	99.1
July 15.....	97.4	99.6	95.9	90.0	99.6	93.8	99.5
October 15.....	98.4	101.5	95.9	90.5	103.0	94.4	99.6
1936—January 15.....	98.9	102.7	96.2	91.3	101.5	95.3	99.7
April 15.....	97.9	98.1	95.6	92.9	103.5	95.7	99.7
July 15.....	98.8	102.3	95.2	94.0	99.5	96.0	99.5
September 15.....	100.2	105.6	96.0	95.1	99.8	96.6	99.5
December 15.....	100.0	103.7	98.8	96.3	99.4	97.0	99.3
1937—March 15.....	101.9	106.2	100.9	97.2	101.0	103.6	100.1
June 15.....	103.4	109.3	102.4	100.6	98.7	104.9	100.1
September 15.....	104.4	108.1	105.9	104.3	99.2	108.5	100.8
December 15.....	103.5	102.5	107.3	106.6	100.8	108.7	101.2
1938—March 15.....	101.5	97.3	104.4	106.7	102.9	106.4	100.9
June 15.....	101.1	98.4	103.5	106.6	97.6	101.9	101.0
September 15.....	101.0	97.9	102.5	106.9	99.0	101.6	101.0
December 15.....	100.0	95.9	101.5	107.2	99.2	100.7	100.1
1939—March 15.....	99.3	94.0	100.8	107.2	100.0	100.6	99.9
June 15.....	98.4	92.2	100.6	107.5	95.0	100.7	100.0
September 15.....	99.7	96.0	100.8	108.4	95.7	100.9	99.9
December 15.....	99.6	94.0	101.7	109.2	97.6	102.9	99.7
1940—March 15.....	99.6	94.0	103.4	109.4	97.8	100.0	99.4
<i>Jacksonville, Fla.</i>							
1935—March 15.....	97.9	96.7	96.8	93.4	106.9	98.6	99.5
July 15.....	98.9	99.6	96.9	95.0	105.4	98.4	99.6
October 15.....	99.2	102.0	96.7	95.9	100.3	98.6	98.5
1936—January 15.....	100.0	102.6	96.8	98.4	100.4	98.2	99.2
April 15.....	98.0	97.6	96.8	98.7	100.7	96.8	98.3
July 15.....	100.1	103.6	96.6	99.1	99.8	96.9	98.7
September 15.....	100.2	103.5	97.1	99.5	100.9	97.2	98.7
December 15.....	100.7	103.0	99.6	100.0	101.8	97.3	99.2
1937—March 15.....	102.4	103.6	103.7	100.6	101.4	101.1	101.9
June 15.....	102.8	104.3	104.7	100.7	100.4	102.4	102.0
September 15.....	103.4	104.7	106.7	100.9	100.4	105.2	102.5
December 15.....	102.7	102.5	106.0	102.2	99.9	105.2	102.3
1938—March 15.....	100.4	97.3	102.3	102.5	100.3	103.7	101.6
June 15.....	100.2	98.4	100.3	102.4	96.8	101.6	101.5
September 15.....	100.2	100.1	100.3	102.4	96.7	99.8	100.0
December 15.....	99.1	97.9	99.0	102.6	96.8	99.8	99.0
1939—March 15.....	98.4	95.1	100.2	102.5	97.1	98.9	99.4
June 15.....	98.2	94.6	99.9	102.5	96.0	98.7	99.6
September 15.....	100.1	100.4	100.1	102.6	96.1	99.9	99.3
December 15.....	99.3	97.4	100.8	103.3	96.9	102.7	98.9
1940—March 15.....	98.9	95.9	101.7	103.6	95.3	99.8	99.3

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electric-ity, and ice	House-furnish-ings	Miscel-laneous
<i>Kansas City, Mo.</i>							
1935—March 15.....	98.0	100.4	96.7	96.3	100.4	95.5	97.0
July 15.....	97.3	98.5	96.1	96.3	99.0	95.5	96.9
October 15.....	98.0	100.5	96.9	97.1	100.2	97.0	96.1
1936—January 15.....	98.7	100.8	96.9	97.3	100.5	95.9	98.0
April 15.....	97.6	96.8	96.9	97.5	100.7	97.0	98.1
July 15.....	99.3	102.7	96.4	97.7	99.4	97.0	98.3
September 15.....	100.7	106.4	96.7	98.1	101.1	97.2	98.5
December 15.....	99.9	102.2	98.2	99.1	101.1	98.7	98.5
1937—March 15.....	101.7	106.2	99.4	99.2	99.9	101.3	100.0
June 15.....	102.9	107.5	101.5	99.9	100.7	103.3	101.0
September 15.....	103.8	106.9	105.1	100.6	102.5	105.4	101.8
December 15.....	102.6	101.5	105.3	102.8	104.2	105.6	101.9
1938—March 15.....	100.9	96.7	104.0	102.6	104.3	105.5	101.6
June 15.....	100.8	98.2	102.9	102.6	98.2	103.1	101.8
September 15.....	100.3	97.6	102.2	102.7	97.5	101.1	101.7
December 15.....	99.7	96.1	101.3	102.7	98.1	100.0	101.6
1939—March 15.....	99.1	94.0	101.2	102.5	98.1	100.7	101.4
June 15.....	99.0	92.8	100.9	102.6	97.4	100.1	102.7
September 15.....	100.6	97.6	101.1	102.6	98.1	100.8	102.9
December 15.....	99.3	93.4	102.0	102.5	98.1	102.2	102.4
1940—March 15.....	98.3	91.2	103.3	102.8	97.9	97.1	101.6
<i>Los Angeles, Calif.</i>							
1935—March 15.....	98.2	103.8	96.2	88.1	104.4	92.4	98.5
July 15.....	95.4	98.1	97.0	88.3	104.4	94.3	94.9
October 15.....	95.1	98.2	96.9	88.6	104.4	95.8	93.4
1936—January 15.....	95.6	100.3	96.9	89.6	104.4	96.3	95.5
April 15.....	95.7	95.7	96.7	91.2	99.5	96.8	96.9
July 15.....	97.2	98.5	96.0	92.4	99.5	96.3	98.7
September 15.....	99.6	104.3	96.7	94.2	99.5	96.5	99.1
December 15.....	99.4	101.6	97.5	96.5	99.5	98.5	99.5
1937—March 15.....	103.4	109.8	99.7	101.3	99.5	103.7	99.8
June 15.....	102.9	105.0	101.4	103.7	99.2	104.6	101.2
September 15.....	104.2	107.2	103.3	104.8	98.8	104.5	101.7
December 15.....	103.2	101.2	104.3	106.9	98.8	105.8	103.1
1938—March 15.....	101.5	96.7	103.3	107.7	98.8	105.3	102.4
June 15.....	101.8	97.2	102.5	108.0	98.8	104.8	102.8
September 15.....	101.8	97.6	102.4	107.9	98.8	102.2	102.8
December 15.....	102.6	100.7	102.3	108.0	98.8	101.8	102.4
1939—March 15.....	101.2	96.4	102.0	108.0	98.8	102.0	102.5
June 15.....	100.3	94.1	102.0	107.8	98.8	100.4	102.3
September 15.....	101.9	99.2	102.1	107.8	95.5	100.6	102.5
December 15.....	100.4	94.6	103.2	107.4	95.5	102.0	102.1
1940—March 15.....	100.7	95.6	103.6	107.2	95.5	101.4	102.0
<i>Manchester, N. H.</i>							
1935—March 15.....	99.1	99.5	99.3	99.9	98.4	95.7	98.9
July 15.....	99.2	100.4	98.8	99.5	96.9	95.8	98.9
October 15.....	98.9	100.0	98.7	99.9	95.2	97.2	98.6
1936—January 15.....	99.8	101.7	98.9	99.6	97.7	97.5	98.5
April 15.....	99.3	100.4	99.1	99.2	99.3	96.4	98.4
July 15.....	100.8	104.5	99.4	99.2	97.5	96.5	98.8
September 15.....	100.4	103.3	99.3	99.2	97.1	96.2	99.3
December 15.....	99.7	101.0	99.5	99.4	97.9	96.6	99.2
1937—March 15.....	102.1	104.8	101.1	99.4	101.2	100.5	100.8
June 15.....	103.2	105.8	101.8	99.5	106.4	102.8	100.9
September 15.....	103.5	105.8	102.7	99.8	106.9	103.5	101.2
December 15.....	101.6	100.5	102.3	100.3	105.3	103.8	101.8
1938—March 15.....	100.1	97.4	101.3	100.3	105.2	103.0	101.0
June 15.....	100.3	98.9	100.9	100.0	101.8	103.0	100.9
September 15.....	99.6	97.8	100.1	100.1	100.6	103.2	100.6
December 15.....	98.8	96.4	99.2	100.9	98.6	103.0	100.2
1939—March 15.....	98.0	94.6	99.1	100.9	98.6	101.8	100.2
June 15.....	97.9	95.1	99.1	100.6	97.2	101.3	99.5
September 15.....	100.4	99.8	99.3	101.0	97.3	102.1	102.2
December 15.....	99.0	95.0	100.1	101.7	101.8	102.4	101.2
1940—March 15.....	100.1	97.8	100.4	102.3	102.2	100.6	101.5

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Memphis, Tenn.</i>							
1935—March 15.....	98.5	103.3	96.6	92.5	100.5	91.9	98.0
July 15.....	97.7	100.8	96.2	92.6	100.7	91.5	98.3
October 15.....	97.6	100.2	96.2	94.6	96.7	92.7	98.1
1936—January 15.....	98.7	101.0	96.9	95.3	102.1	95.1	98.6
April 15.....	98.4	98.9	97.5	95.9	102.3	94.7	99.3
July 15.....	99.7	103.9	97.3	96.5	99.2	94.3	99.2
September 15.....	100.7	106.7	97.2	97.3	99.3	94.3	99.1
December 15.....	101.0	104.4	99.1	99.2	101.9	96.1	99.7
1937—March 15.....	102.7	107.3	100.7	99.8	102.5	101.7	100.5
June 15.....	102.9	106.3	102.3	101.0	102.4	103.3	100.7
September 15.....	103.5	105.6	104.9	102.3	102.3	107.1	100.9
December 15.....	102.5	101.1	104.7	104.3	102.4	107.2	101.2
1938—March 15.....	100.4	96.5	102.4	104.1	102.5	105.0	100.4
June 15.....	100.1	95.7	102.3	104.0	102.0	104.8	100.4
September 15.....	100.4	95.7	101.4	104.1	102.4	104.8	101.4
December 15.....	99.5	95.1	101.3	104.3	95.7	104.4	101.0
1939—March 15.....	98.5	92.2	101.0	104.3	95.7	103.6	100.8
June 15.....	98.1	90.6	101.1	104.3	95.8	103.6	101.0
September 15.....	100.4	97.6	101.2	104.5	95.8	103.9	101.4
December 15.....	98.9	92.8	101.9	104.7	95.6	104.8	100.9
1940—March 15.....	98.5	92.3	102.2	104.9	94.0	102.4	100.6
<i>Minneapolis, Minn.</i>							
1935—March 15.....	96.4	98.4	98.5	91.6	102.3	92.8	95.2
July 15.....	96.1	97.4	98.2	91.6	101.0	93.1	95.5
October 15.....	96.8	98.6	98.5	92.3	100.4	94.3	96.4
1936—January 15.....	98.0	100.6	99.0	92.4	101.7	93.7	97.7
April 15.....	96.9	96.8	98.4	92.7	101.6	94.0	98.0
July 15.....	98.1	100.6	97.5	94.2	99.8	94.1	98.0
September 15.....	100.1	104.8	98.2	96.5	101.3	95.5	98.4
December 15.....	99.9	102.9	99.5	97.9	102.3	96.0	98.0
1937—March 15.....	101.6	104.4	101.4	98.2	101.3	102.3	100.7
June 15.....	102.7	105.7	102.2	100.1	100.5	103.7	101.5
September 15.....	104.2	105.5	104.4	103.3	102.1	106.5	103.3
December 15.....	103.4	102.4	104.1	104.4	101.6	107.0	103.6
1938—March 15.....	101.5	97.4	102.2	104.4	100.3	105.5	103.5
June 15.....	101.8	98.8	101.5	105.4	98.2	104.9	103.5
September 15.....	101.4	98.4	100.2	106.0	98.5	103.2	102.9
December 15.....	100.9	98.1	99.2	106.5	98.4	103.8	101.5
1939—March 15.....	100.2	96.2	99.1	106.7	98.2	102.7	101.1
June 15.....	100.1	96.4	99.2	107.1	95.3	102.9	101.3
September 15.....	101.2	99.5	98.8	107.6	96.1	103.2	101.4
December 15.....	101.1	98.0	100.1	107.8	96.8	105.7	101.2
1940—March 15.....	100.7	97.1	100.9	107.9	96.8	102.7	100.9
<i>Mobile, Ala.</i>							
1935—March 15.....	98.6	99.9	99.5	96.2	103.1	91.3	98.3
July 15.....	98.4	99.0	99.4	95.9	101.8	91.5	99.0
October 15.....	98.9	100.9	99.4	96.1	101.5	92.6	98.3
1936—January 15.....	98.7	100.5	97.0	96.9	102.8	95.3	97.9
April 15.....	97.5	96.7	97.2	96.8	100.3	95.6	98.5
July 15.....	99.6	103.7	97.5	96.7	97.7	96.5	98.1
September 15.....	99.5	103.1	97.7	96.7	98.8	96.8	98.2
December 15.....	99.0	101.6	97.8	98.3	99.6	97.9	96.9
1937—March 15.....	102.5	107.1	99.6	98.6	101.1	104.4	100.2
June 15.....	103.3	106.9	102.9	98.7	99.9	106.1	101.6
September 15.....	103.3	106.3	103.7	99.1	100.3	108.2	101.4
December 15.....	102.0	100.2	103.2	102.8	100.7	106.1	102.8
1938—March 15.....	100.8	98.6	102.7	102.9	100.5	103.6	101.0
June 15.....	100.6	97.6	102.4	103.2	98.8	103.5	101.9
September 15.....	100.3	97.1	100.3	103.2	99.6	102.5	102.2
December 15.....	99.6	96.4	99.7	103.9	99.5	102.3	100.9
1939—March 15.....	99.4	95.7	99.7	104.0	99.1	102.3	101.1
June 15.....	98.8	95.6	99.7	103.9	96.4	102.1	99.7
September 15.....	101.0	100.2	99.6	103.9	97.5	103.2	101.6
December 15.....	99.7	95.8	100.5	105.3	97.4	104.3	101.0
1940—March 15.....	99.1	96.2	100.7	105.6	96.4	101.9	99.0

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>New Orleans, La.</i>							
1935—March 15.....	99.4	101.5	96.1	98.9	104.2	90.8	98.2
July 15.....	98.4	99.3	96.4	98.9	101.1	90.7	97.9
October 15.....	98.9	101.1	95.8	98.7	100.6	91.2	97.7
1936—January 15.....	99.3	101.4	96.3	98.7	100.9	91.6	98.5
April 15.....	97.3	96.7	96.4	98.6	100.3	92.0	97.8
July 15.....	99.7	102.6	96.6	98.7	99.7	92.5	98.2
September 15.....	100.4	104.2	96.6	98.8	99.7	92.4	98.7
December 15.....	100.5	102.2	99.6	99.1	101.0	97.0	99.5
1937—March 15.....	102.4	105.4	101.9	99.1	101.1	100.9	100.5
June 15.....	101.5	102.3	103.5	99.2	100.4	106.9	100.5
September 15.....	103.0	104.8	105.4	99.5	100.5	109.6	101.1
December 15.....	101.6	100.9	105.5	100.0	101.0	110.3	100.9
1938—March 15.....	100.4	97.9	103.9	100.4	101.1	108.2	101.3
June 15.....	99.1	95.4	103.0	100.6	100.0	106.6	100.9
September 15.....	100.3	98.9	102.1	100.9	96.5	104.6	101.4
December 15.....	99.9	97.6	101.1	101.7	96.1	104.7	101.8
1939—March 15.....	99.4	97.0	100.3	101.8	96.4	103.9	101.3
June 15.....	98.7	95.1	100.1	102.2	95.6	103.6	101.5
September 15.....	102.0	102.4	100.0	102.5	100.6	103.7	102.2
December 15.....	100.4	98.5	101.1	102.8	101.8	104.4	100.6
1940—March 15.....	100.9	99.8	101.6	102.9	101.8	102.7	100.5
<i>New York, N. Y.</i>							
1935—March 15.....	98.9	99.4	97.3	97.8	102.9	95.9	99.2
July 15.....	98.3	98.4	97.2	97.8	101.3	96.8	98.7
October 15.....	98.7	99.3	97.1	97.9	100.6	99.0	98.6
1936—January 15.....	99.9	102.9	97.3	98.1	101.2	98.0	98.2
April 15.....	98.6	99.4	97.2	98.2	101.0	98.3	98.1
July 15.....	99.5	101.9	97.2	98.3	100.5	98.2	97.9
September 15.....	100.4	103.9	97.2	98.4	100.9	98.6	98.4
December 15.....	99.5	99.9	100.0	98.9	101.1	100.8	98.8
1937—March 15.....	101.3	103.3	102.1	99.3	100.1	103.7	99.4
June 15.....	101.4	102.7	103.6	99.7	98.8	104.1	100.0
September 15.....	103.9	108.0	106.0	100.2	99.3	106.7	100.8
December 15.....	102.8	104.4	104.6	101.2	100.0	105.3	101.1
1938—March 15.....	99.6	97.0	102.4	101.4	99.9	101.8	100.4
June 15.....	99.7	97.1	101.5	101.5	98.6	100.8	101.4
September 15.....	100.3	98.9	100.5	101.7	98.5	99.4	101.6
December 15.....	100.2	98.6	100.0	102.0	99.9	99.3	101.3
1939—March 15.....	99.2	96.3	99.8	102.1	99.3	97.8	101.0
June 15.....	98.2	93.7	99.8	102.3	97.8	97.3	100.9
September 15.....	101.3	100.6	99.8	102.4	98.0	99.9	102.7
December 15.....	100.1	97.1	100.7	102.5	98.7	100.9	102.6
1940—March 15.....	101.2	99.8	101.9	102.6	100.1	98.4	102.5
<i>Norfolk, Va.</i>							
1935—March 15.....	99.5	100.6	96.9	99.1	103.1	97.7	98.8
July 15.....	98.9	100.0	96.7	99.1	98.8	97.4	98.7
October 15.....	100.1	102.3	97.2	99.0	101.9	97.8	99.0
1936—January 15.....	101.1	105.2	96.9	99.0	101.9	98.2	99.5
April 15.....	99.0	99.1	97.4	98.8	100.3	97.3	99.5
July 15.....	100.0	102.4	97.6	98.7	99.6	96.5	99.6
September 15.....	100.9	104.9	97.6	98.7	99.5	97.3	99.8
December 15.....	101.2	104.5	99.1	99.2	100.5	98.6	99.8
1937—March 15.....	102.1	105.9	100.6	99.1	100.5	101.8	100.2
June 15.....	102.2	105.9	102.1	99.1	99.2	102.4	100.3
September 15.....	102.9	105.9	104.8	99.3	99.5	105.4	101.0
December 15.....	101.8	101.6	104.2	100.9	101.0	105.0	101.1
1938—March 15.....	100.1	97.6	103.2	100.9	100.1	102.7	100.8
June 15.....	99.0	95.4	102.8	100.9	98.2	102.2	100.6
September 15.....	99.0	95.5	101.6	101.0	98.7	101.3	100.6
December 15.....	99.0	95.6	100.6	101.5	100.2	101.2	100.4
1939—March 15.....	98.4	94.2	100.3	101.4	100.1	99.4	100.2
June 15.....	97.3	92.1	100.2	101.5	97.0	98.9	100.0
September 15.....	99.5	97.3	100.3	101.7	99.1	99.3	100.6
December 15.....	98.5	94.0	101.4	101.9	99.4	100.4	100.3
1940—March 15.....	97.7	93.0	102.7	102.1	92.2	99.8	100.3

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electric- ity, and ice	House- furnish- ings	Miscel- laneous
<i>Philadelphia, Pa.</i>							
1935—March 15.....	98.0	98.2	96.3	97.2	104.2	93.4	97.7
July 15.....	98.2	99.3	96.1	97.1	97.3	93.5	99.4
October 15.....	99.0	100.2	96.2	97.1	101.6	95.1	99.6
1936—January 15.....	100.1	102.5	96.9	97.3	101.7	95.2	100.0
April 15.....	99.2	100.1	97.9	97.4	101.6	95.5	99.4
July 15.....	100.2	103.6	97.2	97.7	99.8	95.1	99.2
September 15.....	101.0	104.8	97.4	98.3	101.4	96.5	99.4
December 15.....	100.8	103.6	98.2	98.7	102.3	97.1	99.3
1937—March 15.....	102.2	105.7	100.0	99.1	103.0	101.3	100.0
June 15.....	102.7	106.6	102.1	99.7	99.6	103.9	99.9
September 15.....	104.0	108.6	103.8	100.7	99.7	106.9	100.3
December 15.....	101.6	102.2	103.6	101.8	98.5	107.1	99.7
1938—March 15.....	100.2	97.1	105.0	102.1	99.9	107.5	100.4
June 15.....	100.6	98.2	104.4	102.3	97.2	104.7	101.8
September 15.....	100.1	97.3	103.5	102.4	99.6	104.1	100.9
December 15.....	99.4	95.3	103.1	102.4	100.5	102.5	100.9
1939—March 15.....	98.2	93.9	99.8	102.6	98.7	100.1	100.7
June 15.....	98.0	93.7	99.2	102.7	96.5	100.4	100.8
September 15.....	99.6	97.4	99.7	102.8	97.1	100.8	101.2
December 15.....	98.6	94.2	101.2	102.8	97.6	103.6	100.8
1940—March 15.....	98.3	93.2	101.5	103.0	98.6	102.3	100.8
<i>Pittsburgh, Pa.</i>							
1935—March 15.....	96.9	98.5	96.4	92.7	100.4	94.6	97.6
July 15.....	97.4	99.1	95.8	93.8	96.5	95.2	99.2
October 15.....	98.3	100.3	96.0	93.9	99.0	96.3	100.1
1936—January 15.....	98.7	100.6	96.4	94.3	98.8	96.1	101.0
April 15.....	97.5	97.7	96.5	94.5	98.9	94.8	100.1
July 15.....	100.0	103.4	96.8	97.4	97.8	94.1	100.5
September 15.....	101.2	105.6	97.4	97.5	100.9	96.0	100.6
December 15.....	100.0	101.6	99.1	97.5	100.7	96.9	100.5
1937—March 15.....	101.8	105.6	100.0	97.8	100.7	102.0	100.5
June 15.....	103.6	107.5	102.4	102.8	100.5	103.7	100.4
September 15.....	105.2	109.5	105.4	102.9	101.4	106.1	101.8
December 15.....	102.5	102.8	103.8	102.9	101.2	106.3	100.9
1938—March 15.....	100.8	98.1	102.8	103.2	102.3	104.3	100.7
June 15.....	101.2	99.4	102.7	104.7	98.4	103.8	100.8
September 15.....	101.1	99.0	102.6	104.8	99.9	102.2	100.5
December 15.....	100.3	97.1	101.8	104.7	100.2	102.6	100.1
1939—March 15.....	97.8	90.8	101.5	104.8	100.3	102.0	98.9
June 15.....	98.4	92.7	101.5	105.1	100.3	101.2	98.9
September 15.....	100.1	97.1	101.5	105.0	101.0	101.9	99.1
December 15.....	98.8	93.3	102.4	105.1	101.2	102.9	98.9
1940—March 15.....	99.1	93.8	102.9	105.1	101.5	101.8	99.1
<i>Portland, Maine</i>							
1935—March 15.....	100.0	100.6	99.6	100.4	100.2	97.1	99.8
July 15.....	100.7	103.2	99.4	100.1	99.2	96.8	99.9
October 15.....	100.1	102.2	99.5	100.0	98.4	97.5	98.7
1936—January 15.....	100.5	102.4	99.1	99.9	100.2	98.3	99.6
April 15.....	99.9	99.7	99.6	99.6	101.8	98.6	99.9
July 15.....	101.3	105.2	99.1	99.4	99.4	97.1	100.2
September 15.....	101.1	104.5	99.2	99.4	99.4	97.3	100.1
December 15.....	100.5	102.4	99.4	99.6	100.2	97.8	99.9
1937—March 15.....	102.0	104.2	100.1	99.4	103.6	100.6	101.6
June 15.....	103.6	108.4	101.1	99.7	102.5	102.4	101.8
September 15.....	103.5	107.9	102.4	99.6	103.5	105.6	100.8
December 15.....	101.8	102.2	102.4	100.0	103.4	105.5	100.9
1938—March 15.....	99.3	95.5	100.8	100.3	104.1	103.0	100.3
June 15.....	99.2	96.7	100.0	100.2	100.4	102.3	100.3
September 15.....	99.4	97.7	99.8	100.1	100.6	101.2	100.3
December 15.....	97.8	94.9	99.7	100.3	96.0	100.9	99.3
1939—March 15.....	96.6	91.7	99.5	100.2	94.8	99.9	99.0
June 15.....	96.4	92.1	99.5	100.1	93.8	98.9	98.5
September 15.....	99.0	97.7	99.4	100.7	97.3	99.6	99.7
December 15.....	97.6	92.0	100.1	100.7	101.0	100.9	99.5
1940—March 15.....	97.8	92.9	100.3	100.8	101.1	100.1	99.3

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House- furnish- ings	Miscel- laneous
<i>Portland, Oreg.</i>							
1935—March 15.....	96.4	97.4	97.2	87.6	98.1	98.2	98.0
July 15.....	95.5	94.8	97.3	87.9	97.5	97.4	97.9
October 15.....	95.7	95.9	97.4	90.3	99.1	97.7	96.4
1936—January 15.....	96.8	98.1	97.7	91.1	100.8	96.1	97.0
April 15.....	96.2	97.6	98.1	91.9	100.9	96.9	95.1
July 15.....	98.2	100.4	97.7	94.1	97.0	96.2	98.3
September 15.....	99.3	102.0	97.6	96.7	100.9	96.5	98.6
December 15.....	99.4	100.3	99.0	98.4	102.6	97.3	98.7
1937—March 15.....	102.0	105.3	101.0	100.1	103.0	100.8	100.0
June 15.....	103.0	107.5	101.9	102.3	97.8	102.4	100.3
September 15.....	104.7	107.1	103.5	106.2	101.9	104.9	102.6
December 15.....	103.2	101.7	103.2	107.3	101.6	104.9	103.1
1938—March 15.....	102.7	100.7	102.0	107.4	101.6	103.6	103.1
June 15.....	101.7	99.4	101.6	107.1	100.3	101.4	102.2
September 15.....	101.6	98.8	101.3	107.3	100.8	101.5	102.1
December 15.....	101.7	99.6	101.1	107.0	101.2	101.6	102.0
1939—March 15.....	100.7	97.5	100.7	106.7	99.2	100.7	101.5
June 15.....	100.5	97.2	100.7	106.5	98.4	100.1	101.6
September 15.....	102.1	101.6	100.9	106.8	99.0	100.7	101.8
December 15.....	100.9	97.9	101.6	106.3	99.0	102.5	101.3
1940—March 15.....	99.7	95.6	103.1	106.2	92.7	100.3	101.2
<i>Richmond, Va.</i>							
1935—March 15.....	98.2	98.9	95.6	96.8	100.4	95.7	98.9
July 15.....	98.3	100.0	95.3	96.7	98.7	95.1	99.0
October 15.....	99.7	103.6	95.6	97.0	101.4	95.9	98.7
1936—January 15.....	99.9	104.8	93.5	97.0	101.4	95.5	98.9
April 15.....	98.3	98.6	96.8	97.1	100.3	95.3	99.3
July 15.....	99.8	103.3	96.9	97.2	98.3	95.2	99.6
September 15.....	101.5	107.4	97.3	99.1	98.5	96.5	99.8
December 15.....	102.0	107.7	98.9	99.3	99.9	97.4	100.0
1937—March 15.....	102.0	106.1	99.6	99.4	101.1	101.3	100.4
June 15.....	101.6	104.9	101.4	99.7	97.2	102.1	100.4
September 15.....	103.6	107.2	104.8	101.6	100.7	105.2	101.1
December 15.....	102.0	101.7	105.9	101.8	100.9	106.0	100.7
1938—March 15.....	100.6	97.4	104.6	101.9	101.1	104.2	101.1
June 15.....	99.2	94.6	103.5	102.1	97.7	103.7	100.7
September 15.....	100.0	96.3	102.9	102.5	101.3	102.0	100.8
December 15.....	99.8	96.2	102.2	102.5	101.3	101.8	100.5
1939—March 15.....	98.6	92.7	101.6	102.5	101.4	102.1	100.2
June 15.....	97.4	90.1	101.5	102.6	97.3	101.3	100.0
September 15.....	99.9	96.4	102.0	102.7	100.3	102.9	100.5
December 15.....	98.8	92.5	102.8	102.7	100.6	104.3	100.2
1940—March 15.....	98.4	91.1	104.0	102.8	100.7	102.9	100.2
<i>St. Louis, Mo.</i>							
1935—March 15.....	98.0	98.5	95.8	97.8	101.4	94.6	98.2
July 15.....	98.3	100.0	95.8	97.6	95.7	94.9	98.7
October 15.....	98.2	98.2	96.9	97.7	99.2	97.0	98.7
1936—January 15.....	99.4	101.2	97.5	97.8	99.6	96.1	99.2
April 15.....	98.3	97.6	97.4	98.0	102.2	95.4	99.1
July 15.....	99.8	102.6	96.9	98.3	98.2	95.5	99.5
September 15.....	101.3	106.5	97.4	98.6	99.6	96.9	99.4
December 15.....	99.7	101.3	98.5	99.0	99.5	96.9	99.2
1937—March 15.....	101.8	105.2	99.9	99.6	99.6	102.1	100.3
June 15.....	103.0	106.5	102.6	100.8	99.5	105.9	100.6
September 15.....	104.1	106.8	105.8	101.6	100.7	107.6	101.8
December 15.....	102.7	102.2	105.6	101.8	102.1	107.2	102.1
1938—March 15.....	100.7	98.3	102.8	101.9	101.2	104.4	101.4
June 15.....	100.4	98.9	101.7	101.8	98.8	102.5	101.1
September 15.....	100.7	99.5	101.3	101.8	100.6	100.9	101.1
December 15.....	99.5	97.1	101.0	101.6	101.2	101.2	100.0
1939—March 15.....	99.0	96.1	101.1	101.4	101.8	100.9	99.4
June 15.....	97.8	93.1	101.1	101.3	98.2	100.8	99.6
September 15.....	100.4	98.8	101.3	101.4	100.5	101.0	101.3
December 15.....	99.1	95.1	102.3	101.5	101.4	101.2	100.4
1940—March 15.....	99.0	95.2	103.1	101.5	103.0	96.4	100.3

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electric- ity, and ice	House- furnish- ings	Miscel- laneous
<i>San Francisco, Calif.</i>							
1935—March 15.....	99.4	102.6	95.9	96.9	109.5	94.0	97.9
July 15.....	97.5	97.7	96.0	96.7	109.5	94.7	97.1
October 15.....	97.8	99.1	96.4	96.6	109.5	95.1	96.5
1936—January 15.....	98.4	101.1	96.5	96.6	106.4	95.6	96.6
April 15.....	97.0	97.9	96.4	96.9	106.3	95.5	95.4
July 15.....	97.9	100.1	96.0	96.8	100.5	94.7	96.9
September 15.....	98.7	102.0	96.1	97.2	100.8	95.5	97.1
December 15.....	98.8	101.3	96.9	97.8	101.1	96.6	97.2
1937—March 15.....	101.1	105.4	99.9	98.9	97.6	102.1	98.4
June 15.....	101.5	104.3	102.0	100.0	97.4	102.0	99.5
September 15.....	102.9	105.4	104.9	101.2	97.4	105.1	100.8
December 15.....	103.0	103.2	105.2	101.8	97.7	106.3	102.8
1938—March 15.....	101.2	98.5	103.3	102.2	97.6	104.9	102.9
June 15.....	101.4	98.4	103.0	102.8	95.2	104.1	103.8
September 15.....	101.7	99.2	102.5	102.9	95.2	104.0	103.8
December 15.....	101.4	98.6	102.6	103.0	95.2	103.9	103.6
1939—March 15.....	100.3	95.5	102.0	103.2	95.3	103.1	103.5
June 15.....	99.2	93.5	101.7	103.3	95.3	101.6	102.3
September 15.....	101.0	99.0	102.1	103.4	91.7	101.8	102.6
December 15.....	100.2	96.1	102.7	103.8	91.8	103.1	102.4
1940—March 15.....	99.8	95.0	103.0	103.6	91.8	102.9	102.3
<i>Savannah, Ga.</i>							
1935—March 15.....	98.6	98.4	97.3	97.4	99.7	96.7	100.0
July 15.....	98.5	98.1	97.1	97.5	97.5	96.5	100.5
October 15.....	100.0	101.9	97.2	97.6	99.5	97.4	100.5
1936—January 15.....	100.2	102.0	97.7	97.6	99.7	97.9	100.9
April 15.....	98.5	99.2	96.9	97.6	99.9	97.7	98.6
July 15.....	100.1	103.7	96.5	97.6	99.7	98.6	98.9
September 15.....	100.3	104.2	96.9	97.6	99.4	98.3	99.0
December 15.....	100.2	102.5	99.9	98.2	99.4	98.9	99.0
1937—March 15.....	101.7	104.6	101.3	98.5	100.4	102.2	100.2
June 15.....	102.1	104.7	103.2	98.6	100.4	103.4	100.6
September 15.....	103.0	105.6	106.0	98.9	101.1	104.2	101.0
December 15.....	101.9	101.0	105.4	101.1	102.3	104.5	101.5
1938—March 15.....	100.3	98.0	103.2	101.4	101.7	101.6	100.9
June 15.....	99.8	97.8	101.4	101.5	100.7	100.7	100.1
September.....	99.4	97.4	100.7	101.9	100.6	99.6	99.8
December 15.....	99.5	97.2	100.4	103.3	100.5	99.9	99.6
1939—March 15.....	98.7	94.7	100.5	103.8	100.7	100.0	99.4
June 15.....	98.7	95.1	99.6	103.8	100.6	100.3	99.4
September 15.....	100.6	100.8	99.4	104.0	97.6	101.7	99.7
December 15.....	99.7	96.9	100.4	104.4	98.2	102.9	100.0
1940—March 15.....	100.0	97.3	102.2	104.4	97.7	104.6	99.9
<i>Scranton, Pa.</i>							
1935—March 15.....	99.8	98.8	96.8	101.2	107.5	97.2	99.6
July 15.....	99.9	99.7	96.9	100.9	101.9	97.3	101.0
October 15.....	100.3	99.8	97.1	100.8	108.5	98.0	100.1
1936—January 15.....	101.4	101.8	97.3	100.7	108.6	98.2	101.5
April 15.....	99.4	99.1	97.4	100.6	101.5	97.0	99.5
July 15.....	101.4	103.9	97.2	100.6	103.3	97.5	100.2
September 15.....	102.5	105.8	97.4	100.6	105.6	98.3	100.8
December 15.....	101.8	103.6	99.1	100.4	106.7	98.7	100.1
1937—March 15.....	102.1	104.9	100.6	100.6	97.4	104.5	100.2
June 15.....	102.9	107.2	101.3	100.5	93.6	106.3	100.8
September 15.....	103.8	107.9	103.5	100.4	96.5	108.1	101.1
December 15.....	101.2	101.0	103.3	100.3	98.2	107.9	100.9
1938—March 15.....	99.7	98.0	102.2	100.0	98.2	103.7	100.5
June 15.....	99.6	99.1	101.9	99.8	95.2	100.2	100.3
September 15.....	97.7	95.0	101.9	98.8	96.4	97.4	99.9
December 15.....	97.9	95.9	101.5	98.9	96.7	98.5	98.8
1939—March 15.....	96.9	93.6	101.5	98.9	96.7	97.6	98.5
June 15.....	96.4	93.1	101.4	98.5	93.9	97.3	98.4
September 15.....	98.7	99.0	101.4	98.2	94.4	97.5	99.0
December 15.....	97.4	95.1	101.8	97.9	94.6	99.9	98.9
1940—March 15.....	98.4	96.4	101.9	98.2	96.3	98.9	100.8

TABLE 14.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers—Continued

City and period	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
<i>Seattle, Wash.</i>							
1935—March 15.....	97.4	100.9	93.9	91.1	99.1	95.4	97.6
July 15.....	95.7	95.4	95.6	91.1	98.4	94.9	97.8
October 15.....	95.9	97.0	96.6	91.6	98.3	95.4	96.1
1936—January 15.....	97.8	101.5	96.6	91.8	98.5	96.6	96.9
April 15.....	96.5	97.8	96.4	92.2	98.9	97.1	96.7
July 15.....	97.7	100.0	96.0	93.5	97.0	97.5	98.0
September 15.....	99.0	102.2	96.4	95.1	98.5	98.1	98.6
December 15.....	99.5	102.7	97.7	96.1	98.8	99.5	98.4
1937—March 15.....	102.0	107.1	100.5	97.9	99.2	103.4	99.4
June 15.....	102.2	105.1	103.3	99.3	100.9	102.6	100.4
September 15.....	103.7	105.4	105.5	105.5	100.8	106.0	101.0
December 15.....	103.2	101.9	105.3	106.2	102.4	106.7	102.4
1938—March 15.....	102.2	99.7	103.3	106.6	102.6	103.4	102.3
June 15.....	101.2	96.9	102.3	107.0	102.1	103.1	102.1
September 15.....	101.1	96.8	102.2	106.9	102.6	101.4	102.1
December 15.....	101.2	97.4	102.2	106.8	102.6	101.3	102.0
1939—March 15.....	100.9	96.7	101.9	107.0	102.2	100.4	101.8
June 15.....	100.8	95.9	102.2	106.9	100.7	99.7	102.7
September 15.....	102.6	102.0	102.2	106.8	97.6	99.4	103.0
December 15.....	100.9	96.6	103.2	106.8	98.2	101.1	102.5
1940—March 15.....	101.6	98.7	103.7	106.6	98.3	99.4	102.6
<i>Washington, D. C.</i>							
1935—March 15.....	98.6	101.7	93.3	98.2	104.1	92.0	98.2
July 15.....	98.7	102.0	93.9	98.3	99.4	92.2	98.4
October 15.....	99.4	102.9	95.6	98.5	102.4	93.9	98.6
1936—January 15.....	99.9	103.1	97.4	99.0	102.3	95.5	98.8
April 15.....	98.6	98.1	97.5	99.2	102.1	95.6	98.8
July 15.....	99.8	102.7	97.4	99.5	99.5	96.0	98.6
September 15.....	100.5	105.2	97.5	99.9	100.6	97.2	98.3
December 15.....	100.4	101.7	98.9	100.5	101.0	98.3	100.1
1937—March 15.....	101.9	104.8	100.5	100.7	100.7	101.7	100.8
June 15.....	102.4	106.8	102.4	100.9	97.1	103.0	100.3
September 15.....	103.3	107.3	104.7	101.2	99.1	105.3	101.0
December 15.....	102.2	101.3	105.3	101.2	101.0	106.1	102.1
1938—March 15.....	100.1	95.6	103.7	101.3	100.1	104.5	101.4
June 15.....	100.1	96.6	103.3	101.0	97.3	104.4	101.2
September 15.....	100.1	96.9	102.4	100.8	99.0	103.8	101.3
December 15.....	99.7	96.2	101.9	100.4	99.9	104.1	100.9
1939—March 15.....	98.9	94.5	101.8	100.3	99.5	101.7	100.5
June 15.....	98.5	93.6	101.7	100.2	97.0	101.9	100.4
September 15.....	100.3	99.5	102.0	100.1	96.7	103.0	100.9
December 15.....	98.9	93.8	102.8	100.1	98.5	106.3	100.2
1940—March 15.....	99.6	96.1	103.0	100.0	99.2	102.9	101.0

TREND OF COST OF LIVING IN NORWAY, 1938-40

THE following figures show the trend in cost of living in Norway in 1938-40. They are based upon a family of 4.46 persons with an expenditure of about 3,600 kroner in 1938.¹

Trend in Cost of Budget of Norwegian Worker's Family of 4.46 Persons, 1938 to 1940

Items	Yearly average cost (in kroner ¹) of specified item			
	1938	August 1939	January 1940	
			Amount	Index (1938=100)
Food.....	1,697.81	1,713.76	1,852.53	109.1
Beef.....	281.67	276.60	282.23	100.2
Pork.....	64.73	68.81	75.86	117.2
Fish.....	126.63	129.92	138.66	109.0
Milk, butter, cheese, and eggs.....	568.07	590.22	636.24	112.0
Bread.....	270.91	259.26	275.24	101.6
Meal, grain, potatoes.....	187.03	184.04	204.42	109.3
Imported provisions (coffee, tea, rice, etc.).....	161.00	166.80	198.67	123.4
Other food items.....	37.77	38.11	41.21	109.1
Beverages and tobacco.....	131.28			
Light and heat:				
Coal, coke, wood, and petroleum.....	95.19	87.77	118.04	124.0
Gas and electricity.....	105.04			
Clothing.....	505.89			
Housing (rent).....	494.30			
Other expenditures.....	{ ² 569.44 ³ 450.89	{		
Entire budget.....	{ ² 3,598.95 ³ 3,480.40	{ ² 3,623.71 ³ 3,507.50	{ ² 3,836.95 ³ 3,722.20	{ ² 106.6 ³ 106.9

¹ Exchange rate of krone (100 øre), in January 1940=22.7 cents.

² Family with labor-union affiliation.

³ Family without labor-union affiliation.

¹ Norway. Statistiske Sentralbyrå, Meddelelser (Oslo), Nos. 1 and 2, 1940.

Industrial Disputes

TREND OF STRIKES

THERE was a substantial reduction in strike activity in June 1940 as compared with May, according to preliminary estimates. The declines amounted to 19 percent in number of strikes, to 32 percent in number of workers involved, and to 38 percent in man-days idle because of strikes in June. The largest strikes of the month were (1) a strike of several hundred motortruck drivers in and around Albany, N. Y., which lasted about a week, and (2) a 1-day strike of about 3,000 coal miners in western Pennsylvania.

*Trend of Strikes, 1933 to June 1940*¹

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1933.....		1,695				1,168,272		16,872,128
1934.....		1,856				1,466,695		19,591,949
1935.....		2,014				1,117,213		15,456,337
1936.....		2,172				788,648		13,901,956
1937.....		4,740				1,860,621		28,424,857
1938.....		2,772				688,376		9,148,273
1939.....		2,613				1,170,962		17,812,219
<i>1939</i>								
January.....	120	203	323	184	139	51,159	72,427	513,460
February.....	139	204	343	204	139	68,252	88,267	553,138
March.....	139	210	349	199	150	43,337	64,660	618,147
April.....	150	281	431	255	176	396,166	425,748	4,902,238
May.....	176	258	434	272	162	95,239	457,407	3,547,868
June.....	162	245	407	269	138	62,534	127,474	958,127
July.....	138	251	389	216	173	175,542	211,548	1,168,382
August.....	173	275	448	272	176	79,670	118,772	1,101,419
September.....	176	197	373	222	151	36,846	103,538	892,485
October.....	151	205	356	217	139	106,628	139,608	1,508,120
November.....	139	178	317	201	116	43,239	130,341	1,664,574
December.....	116	106	222	128	94	12,350	37,122	384,261
<i>1940</i>								
January.....	94	114	208	117	91	25,056	39,403	238,081
February.....	91	137	228	133	95	27,869	36,142	278,956
March.....	95	134	229	142	87	20,811	40,621	366,563
April.....	87	188	275	174	101	36,082	49,058	423,172
May ¹	101	209	310	185	125	47,000	70,000	650,000
June ¹	125	170	295	180	115	32,000	58,000	400,000

¹ Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from more than 650 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

As compared with June a year ago, the estimates for June 1940 show decreases of 31 percent in number of strikes, 49 percent in number of workers involved, and 58 percent in man-days of idleness.

The figures shown for May and June 1940 in the foregoing table are preliminary estimates based on newspaper reports and other information available as this goes to press. An analysis of strikes, in each of these months, based on detailed and verified information, will appear in subsequent issues of the Monthly Labor Review.



STRIKES IN APRIL 1940¹

THE number of strikes beginning in April showed an increase over the preceding months, but were a third less than in April 1939. The Bureau has received detailed information on 188 strikes which began in April, involving 36,000 workers. These strikes, together with 87 which continued into April from preceding months, resulted in 423,000 man-days of idleness during April.

The building and construction industry had more new strikes (27) than any other. Only 4,000 workers were involved, however, as most of these strikes were small, the largest involving only 900 workers. Other industry groups having comparatively large numbers of strikes were trade (25), transportation and communication (18), and the lumber industries (17). In transportation and communication there were 7,000 workers involved, a greater number than in any other industry group. This was due largely to a month-long strike of taxicab drivers in New York City. This was the largest strike of the month. Industries showing large numbers of man-days of idleness were lumber (61,389), transportation and communication (41,433), building and construction (37,579), and extraction of minerals (34,285). The large number of man-days lost in the lumber industry was due principally to a strike in several furniture plants in Indiana, which began March 11 and did not end until the middle of May.

¹ Detailed information on a few strikes has not yet been received. (See footnote to preceding table.) Data on missing strikes will be included in the annual report.

TABLE 1.—*Strikes in April 1940, by Industry*

Industry	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
All industries	188	36,082	275	49,058	423,172
Iron and steel and their products, not including machinery	6	474	12	1,573	13,521
Cast-iron pipe and fittings.....			1	280	1,850
Hardware.....	1	19	1	19	133
Plumbers' supplies and fixtures.....	1	97	1	97	1,552
Stoves.....	2	269	2	269	2,080
Structural and ornamental metalwork.....	2	89	2	89	234
Tin cans and other tinware.....			2	190	4,180
Tools (not including edge tools, machine tools, files, and saws).....			1	101	2,222
Wire and wire products.....			1	78	390
Other.....			1	450	900
Machinery, not including transportation equipment	7	1,260	11	1,793	18,278
Agricultural implements.....	1	360	1	360	1,800
Electrical machinery, apparatus, and supplies.....	1	65	2	87	1,004
Foundry and machine-shop products.....	2	65	3	75	355
Machine tools, power driven.....			1	150	1,950
Other.....	3	770	4	1,051	13,169
Transportation equipment	3	1,079	4	2,113	25,414
Automobiles, bodies and parts.....	2	752	2	752	704
Cars, electric- and steam-railroad.....			1	1,034	22,748
Shipbuilding.....	1	327	1	327	1,962
Nonferrous metals and their products	4	317	5	455	6,016
Smelting and refining—copper, lead, and zinc.....	2	202	2	202	1,470
Stamped and enameled ware.....	2	115	3	253	4,546
Lumber and allied products	17	2,331	22	4,586	61,389
Furniture.....	11	927	14	2,270	34,136
Millwork and planing.....	3	775	3	775	7,429
Sawmills and logging camps.....	2	617	2	617	1,406
Other.....	1	12	3	924	18,418
Stone, clay, and glass products	7	787	8	986	14,371
Brick, tile, and terra cotta.....	3	489	3	489	7,626
Cement.....	1	52	1	52	52
Glass.....			1	229	5,038
Marble, granite, slate, and other products.....	1	32	1	32	128
Pottery.....	1	114	1	114	1,457
Other.....	1	70	1	70	70
Textiles and their products	11	1,351	21	2,242	29,468
Fabrics:					
Cotton goods.....	1	6	1	6	18
Silk and rayon goods.....	2	26	2	26	110
Other.....	1	54	2	154	2,324
Wearing apparel:					
Clothing, men's.....	1	32	2	198	3,684
Clothing, women's.....	2	387	5	489	3,096
Hats, caps, and millinery.....	1	130	3	439	9,398
Hosiery.....	2	544	3	658	7,156
Knit goods.....	1	172	3	272	3,682
Leather and its manufactures	4	400	7	1,557	13,441
Boots and shoes.....	2	228	2	228	1,288
Other leather goods.....	2	172	5	1,329	12,153
Food and kindred products	13	769	18	1,007	7,884
Baking.....	1	9	3	105	1,755
Beverages.....	1	18	1	18	18
Canning and preserving.....	4	357	4	357	3,091
Flour and grain mills.....	1	21	1	21	42
Slaughtering and meat packing.....	4	249	7	391	2,678
Other.....	2	115	2	115	300
Tobacco manufactures	2	2,050	4	2,132	5,900
Cigars.....	2	2,050	4	2,132	5,900
Paper and printing	8	457	19	1,132	13,968
Boxes, paper.....	4	186	6	225	1,122
Paper and pulp.....	1	210	2	291	2,736
Printing and publishing:					
Book and job.....	1	16	4	61	434
Newspapers and periodicals.....	1	17	3	35	467
Other.....	1	28	4	520	9,209

TABLE 1.—*Strikes in April 1940, by Industry—Continued*

Industry	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
Chemicals and allied products	1	92	2	692	9,086
Paints and varnishes.....	1	92	1	92	686
Other.....			1	600	8,400
Rubber products	3	1,613	3	1,613	19,338
Rubber boots and shoes.....	1	345	1	345	690
Rubber tires and inner tubes.....	1	1,237	1	1,237	18,555
Other rubber goods.....	1	31	1	31	93
Miscellaneous manufacturing	11	871	12	1,097	11,471
Furriers and fur factories.....			1	226	4,972
Other.....	11	871	11	871	6,499
Extraction of minerals	3	6,757	6	7,406	34,295
Coal mining, anthracite.....			1	103	206
Coal mining, bituminous.....	3	6,757	5	7,303	34,079
Transportation and communication	18	7,028	22	7,185	41,433
Water transportation.....	6	1,085	7	1,160	6,145
Motortruck transportation.....	8	339	9	371	1,986
Motorbus transportation.....	1	23	2	59	151
Taxicabs and miscellaneous.....	2	5,510	3	5,524	33,080
Steam railroad.....	1	71	1	71	71
Trade	25	2,128	33	2,289	12,623
Wholesale.....	7	1,350	11	1,403	5,961
Retail.....	18	778	22	886	6,662
Domestic and personal service	8	1,324	16	1,995	11,593
Hotels, restaurants, and boarding houses.....	6	68	13	614	4,012
Laundries.....	1	1,250	2	1,375	7,575
Dyeing, cleaning, and pressing.....	1	6	1	6	6
Professional service	3	156	5	217	1,769
Recreation and amusement.....	2	150	3	180	1,380
Semiprofessional, attendants, and helpers.....	1	6	2	37	409
Building and construction	27	4,040	34	4,602	37,579
Buildings, exclusive of PWA.....	19	2,844	25	3,056	17,166
All other construction (bridges, docks, etc., and PWA buildings).....	8	1,196	9	1,546	20,413
Agriculture and fishing	2	471	4	1,819	28,507
Agriculture.....	2	471	2	471	1,509
Fishing.....			2	1,348	26,998
Other nonmanufacturing industries	5	357	7	637	5,818

The largest number of strikes (41) beginning in April was in New York. Most of these were small, except the strike of taxicab drivers which involved over 5,000 workers, and accounted principally for the fact that New York had more workers involved and more man-days of idleness than any other State. Pennsylvania with 19 strikes and California with 18 were next in order. Pennsylvania had almost as many workers involved as New York, largely because of a strike of over 4,000 coal miners in the western part of the State. Of the disputes which extended across State lines, the largest was a strike of tugboatmen which affected 17 Great Lakes ports, running from April 25 to May 6.

TABLE 2.—*Strikes in April 1940, by States*

State	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
All States.....	188	36,082	275	49,058	423,172
Alabama.....	2	270	2	270	1,110
Arkansas.....	5	236	6	258	774
California.....	18	2,513	27	2,834	16,058
Connecticut.....	3	384	3	384	1,032
District of Columbia.....	1	50	2	80	930
Florida.....	1	16	1	16	192
Georgia.....			3	227	4,366
Illinois.....	11	1,445	14	2,713	40,484
Indiana.....	9	1,913	10	3,088	43,348
Iowa.....	3	34	3	34	264
Kansas.....	1	52	1	52	52
Kentucky.....	2	1,475	2	1,475	6,850
Louisiana.....	2	32	3	104	602
Maryland.....	3	70	4	236	3,938
Massachusetts.....	4	193	9	2,138	33,096
Michigan.....			1	32	128
Minnesota.....	1	51	2	131	2,015
Mississippi.....	1	200	2	391	2,692
Missouri.....	8	392	11	665	7,893
New Jersey.....	8	792	12	1,548	19,682
New York.....	41	8,440	65	9,997	81,473
North Carolina.....	4	639	5	753	7,666
Ohio.....	10	2,205	12	2,223	22,365
Oklahoma.....	1	8	1	8	48
Oregon.....	2	103	2	103	446
Pennsylvania.....	19	7,944	32	9,685	50,675
Rhode Island.....	1	87	2	114	309
Tennessee.....	1	208	2	220	1,380
Texas.....	3	399	5	460	3,162
Utah.....	1	35	1	35	210
Vermont.....	1	15	1	15	90
Virginia.....	3	2,120	6	3,753	22,727
Washington.....	7	1,035	7	1,035	3,641
West Virginia.....	2	948	4	1,249	10,582
Wisconsin.....	5	299	6	324	1,131
Wyoming.....	1	25	1	25	150
Interstate.....	3	1,454	5	2,383	31,611

Almost 70 percent (131) of the strikes beginning in April involved fewer than 100 workers. The average was 192 workers per strike. Only one, that of the taxicab drivers in New York City, previously mentioned, involved more than 5,000 workers.

TABLE 3.—*Strikes Beginning in April 1940, Classified by Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—					
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000
All industries.....	188	49	82	42	8	6	1
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	6	2	2	2			
Machinery, not including transportation equipment.....	7		5	1	1		
Transportation equipment.....	3			3			
Nonferrous metals and their products.....	4		3	1			
Lumber and allied products.....	17	3	8	4	2		
Stone, clay, and glass products.....	7		5	2			
Textiles and their products.....	11	2	4	5			
Leather and its manufactures.....	4		2	2			
Food and kindred products.....	13	4	6	3			
Tobacco manufactures.....	2		1			1	
Paper and printing.....	8	3	3	2			
Chemicals and allied products.....	1		1				
Rubber products.....	3		1	1		1	
Miscellaneous manufacturing.....	11	3	5	3			
<i>Nonmanufacturing</i>							
Extraction of minerals.....	3				1	2	
Transportation and communication.....	18	8	5	3	1		1
Trade.....	25	10	12	2		1	
Domestic and personal service.....	8	7				1	
Professional service.....	3	1	1	1			
Building and construction.....	27	5	15	4	3		
Agriculture and fishing.....	2		1	1			
Other nonmanufacturing industries.....	5	1	2	2			

Approximately half of the strikes beginning in April, but including only a fourth of the total workers involved, were due to disputes over union-organization matters—mostly union recognition, closed or union shop, and discrimination. In many of these strikes the questions of wages and hours were secondary issues.

Wages and hours were the major issues in about 31 percent of the strikes, including 44 percent of the total workers involved. A large proportion of these strikes were for wage increases.

Nineteen percent of the strikes, which included about 31 percent of the total workers involved, were due to a number of miscellaneous causes, most of which were specific grievances over such matters as seniority, increased work load, methods of hiring, and changes in work methods. The largest strike in this group involved about 4,500 men in "captive" coal mines of the Jones & Laughlin Steel Corporation in western Pennsylvania, where the dispute was over seniority rights in connection with the lay-off of more than 100 men because of displacement of hand processes with mechanized equipment. (See table 4.)

Over 43 percent of the 174 strikes ending in April lasted less than a week, 36 percent lasted from a week up to a month, 14 percent from 1 up to 3 months, and 12 strikes (7 percent) had been in progress more than 3 months before settlements were reached or production

was resumed. Most of these prolonged strikes were small, only one of them involving over 100 workers. (See table 5.)

TABLE 4.—Major Issues Involved in Strikes Beginning in April 1940

Major issue	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues.....	188	100.0	36,082	100.0
Wages and hours	59	31.4	15,713	43.6
Wage increase.....	45	24.0	13,486	37.5
Wage decrease.....	9	4.8	795	2.2
Wage increase, hour decrease.....	4	2.1	195	.5
Wage decrease, hour increase.....	1	.5	1,237	3.4
Union organization	93	49.5	9,326	25.8
Recognition.....	19	10.1	937	2.6
Recognition and wages.....	23	12.3	4,529	12.6
Recognition and hours.....	1	.5	6	(1)
Recognition, wages, and hours.....	13	6.9	734	2.0
Closed or union shop.....	22	11.8	2,068	5.7
Discrimination.....	14	7.4	917	2.5
Other.....	1	.5	135	.4
Miscellaneous	36	19.1	11,043	30.6
Sympathy.....	2	1.1	62	.2
Rival unions or factions.....	4	2.1	872	2.4
Jurisdiction ²	4	2.1	207	.6
Other.....	26	13.8	9,902	27.4

¹ Less than a tenth of 1 percent.

² It is probable that the figures here given do not include all jurisdictional strikes. Owing to the local nature of these disputes, it is difficult for the Bureau to find out about all of them.

TABLE 5.—Duration of Strikes Ending in April 1940

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than 1½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries.....	174	76	38	24	16	8	12
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	9	2	2	3	1		1
Machinery, not including transportation equipment.....	7	1	3	2	1		
Nonferrous metals and their products.....	2	2					
Lumber and allied products.....	7	4	1	1		1	
Stone, clay, and glass products.....	1			1			
Textiles and their products.....	15	4	5	1	2		3
Leather and its manufactures.....	6	2	1	1		2	
Food and kindred products.....	12	6	2		2	1	1
Tobacco manufactures.....	3	1			1		1
Paper and printing.....	15	6	1	3	3		2
Chemicals and allied products.....	1		1				
Rubber products.....	2	2					
Miscellaneous manufacturing.....	7	2	3	2			
<i>Nonmanufacturing</i>							
Extraction of minerals.....	5	2	1	1	1		
Transportation and communication.....	16	11	3			1	1
Trade.....	19	12	3	1	1	1	1
Domestic and personal service.....	10	2	2	2	2	2	
Professional service.....	3	2					1
Building and construction.....	27	10	9	6	1		1
Agriculture and fishing.....	2	1			1		
Other nonmanufacturing industries.....	5	4	1				

A greater proportion (44 percent) of the strikes ending in April were settled with the aid of Government officials or boards than by any other means. About 36 percent of the settlements were negotiated directly by the employers and representatives of organized workers. This group included half of the total workers involved. No formal settlements were reached in 17 percent of the strikes, which were terminated during the month. In these cases the strikes were terminated when the workers returned to their jobs without settlement of the disputed issues, new workers were hired to fill the vacancies, the employers moved to another locality, or they closed their establishments and went out of business.

TABLE 6.—*Methods of Negotiating Settlements of Strikes Ending in April 1940*

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	174	100.0	25,336	100.0
Employers and workers directly.....	2	1.1	212	.8
Employers and representatives of organized workers directly.....	63	36.2	12,680	50.1
Government officials or boards.....	76	43.8	11,230	44.3
Private conciliators or arbitrators.....	3	1.7	184	.7
Terminated without formal settlement.....	30	17.2	1,030	4.1

About 38 percent of the strikes ending in April resulted in substantial gains to the workers. One-fourth of the total workers involved were in this group. About 34 percent of the strikes, including a large proportion (65 percent) of the workers involved, were settled on a compromise basis. In about a fifth of the strikes the workers were unsuccessful, making little or no gains. The latter, however, were very small strikes, including less than 5 percent of the total workers involved in all strikes terminated during April.

TABLE 7.—*Results of Strikes Ending in April 1940*

Result	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	174	100.0	25,336	100.0
Substantial gains to workers.....	67	38.5	6,381	25.2
Partial gains or compromises.....	60	34.5	16,454	64.9
Little or no gains to workers.....	36	20.7	1,249	4.9
Jurisdiction, rival union, or faction settlements.....	8	4.6	1,161	4.6
Indeterminate.....	3	1.7	91	.4

In approximately half of the strikes ending in April, the principal issues were union recognition, closed shop, or other union-organization matters. Of this group about 48 percent were successful from the workers' point of view, 24 percent were compromised, and 27 percent

resulted in little or no gains to the workers. In many of these organization strikes, questions of wages and hours were involved also. In strikes primarily over wages and hours, most of which were demands for wage increases, the workers were successful in 36 percent, obtained compromise settlements in about 51 percent, and made little or no gains as a result of 13 percent.

Over half (52 percent) of the workers involved in union-organization disputes were successful in obtaining substantially all that was demanded, and partial gains were obtained in the cases of 34 percent of the workers. Of the workers involved in the wage-and-hour strikes, 32 percent substantially won their demands and about 66 percent were partially successful.

TABLE 8.—Results of Strikes Ending in April 1940, in Relation to Major Issues Involved

Major issue	Total	Strikes resulting in—				
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlement	Indeterminate
Number of strikes						
All issues.....	174	67	60	36	8	3
Wages and hours.....	53	19	27	7		
Wage increase.....	43	15	23	5		
Wage decrease.....	6	2	3	1		
Wage increase, hour decrease.....	4	2	1	1		
Union organization.....	66	41	21	23		1
Recognition.....	19	8	3	8		
Recognition and wages.....	17	10	5	2		
Recognition and hours.....	2	1		1		
Recognition, wages, and hours.....	15	9	4	2		
Closed or union shop.....	20	7	6	7		
Discrimination.....	12	5	3	3		1
Other.....	1	1				
Miscellaneous.....	35	7	12	6	8	2
Sympathy.....	2					2
Rival unions or factions.....	6				6	
Jurisdiction.....	2				2	
Other.....	25	7	12	6		
Number of workers involved						
All issues.....	25,336	6,381	16,454	1,249	1,161	91
Wages and hours.....	9,317	2,996	6,114	207		
Wage increase.....	8,703	2,684	5,934	85		
Wage decrease.....	398	221	105	72		
Wage increase, hour decrease.....	216	91	75	50		
Union organization.....	5,624	2,901	1,928	772		23
Recognition.....	1,218	843	73	302		
Recognition and wages.....	1,281	919	310	52		
Recognition and hours.....	44	6		38		
Recognition, wages, and hours.....	944	551	312	81		
Closed or union shop.....	1,471	287	969	215		
Discrimination.....	531	100	264	84		23
Other.....	135	135				
Miscellaneous.....	10,396	484	8,412	270	1,161	68
Sympathy.....	68					68
Rival unions or factions.....	1,076				1,076	
Jurisdiction.....	85				85	
Other.....	9,166	484	8,412	270		

ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, JUNE 1940

THE United States Conciliation Service, in June disposed of 373 situations involving 327,725 workers. The services of this agency were requested by the employees, employers, and other interested parties.

Of these situations, 253 were strikes, threatened strikes, lock-outs, and controversies, involving 321,576 workers. The remaining situations, involving 6,149 workers, were services rendered, such as filling requests for information, adjusting complaints, consulting with labor and management, etc.

The facilities of the Service were used in 26 major industrial fields, such as building trades, and the manufacture of foods, iron and steel, textiles, etc. (table 1), and were utilized by employees and employers in 36 States, Alaska, and the District of Columbia (table 2).

TABLE 1.—*Situations Disposed of by U. S. Conciliation Service, June 1940, by Industries*

Industry	Disputes		Other situations		Total	
	Num- ber	Workers involved	Num- ber	Workers involved	Num- ber	Workers involved
All industries.....	253	321, 576	120	6, 149	373	327, 725
Automobile.....	6	218, 615	1	2	7	218, 617
Building trades.....	11	3, 155	19	1, 865	30	5, 020
Chemicals.....	5	558			5	558
Communication.....	3	10, 053			3	10, 053
Domestic and personal.....	16	704	3	3	19	707
Food.....	50	25, 005	7	57	57	25, 062
Iron and steel.....	21	16, 126	7	141	28	16, 267
Leather.....	5	419	1	279	6	698
Lumber.....	9	2, 405	3	3	12	2, 408
Machinery.....	20	7, 351	6	243	26	7, 594
Maritime.....	4	1, 456	2	251	6	1, 707
Mining.....	2	1, 075	2	701	4	1, 776
Motion picture.....	1	35	1	10	2	45
Nonferrous metals.....	6	322			6	322
Paper.....	3	9, 043	3	81	6	9, 124
Petroleum.....	1	11	8	756	9	767
Professional.....	2	89	2	11	4	100
Printing.....	2	1, 517	2	161	4	1, 678
Rubber.....	6	4, 772	2	2	8	4, 774
Stone, clay, and glass.....	9	1, 330	4	4	13	1, 334
Textile.....	18	9, 800	13	456	31	10, 256
Tobacco.....	2	46	1	350	3	396
Trade.....	16	3, 219	6	82	22	3, 301
Transportation.....	18	2, 947	6	8	24	2, 955
Transportation equipment.....	4	762	2	12	6	774
Utilities.....	1	90			1	90
Unclassified.....	12	671	19	671	31	1, 342

TABLE 2.—Situations Disposed of by United States Conciliation Service June 1940,
by States

States	Disputes		Other situations		Total	
	Num- ber	Workers involved	Num- ber	Workers involved	Num- ber	Workers involved
All States.....	253	321, 576	120	6, 149	373	327, 725
Alabama.....	13	9, 694	5	155	18	9, 849
Alaska.....	1	90	4	903	5	993
California.....	22	4, 567	17	1, 054	39	5, 621
Colorado.....	3	620			3	620
Delaware.....	1	150			1	150
District of Columbia.....	12	1, 651	3	5	15	1, 656
Florida.....	2	359	2	2	4	361
Georgia.....			3	261	3	261
Illinois.....	14	1, 277	8	535	22	1, 812
Indiana.....	4	302	3	155	7	457
Iowa.....	4	355	3	47	7	402
Kansas.....	3	696			3	696
Kentucky.....	5	1, 155	1	1	6	1, 156
Louisiana.....	5	2, 045			5	2, 045
Maryland.....	3	87	2	2	5	89
Massachusetts.....	8	9, 965	3	16	11	9, 981
Michigan.....	5	218, 055	1	4	6	218, 059
Minnesota.....	6	535	2	3	8	538
Missouri.....	6	625	1	23	7	648
Montana.....			1	150	1	150
Nebraska.....	5	303			5	303
New Jersey.....	5	912	10	91	15	1, 003
New York.....	15	14, 676	17	1, 558	32	16, 234
North Carolina.....	2	62	1	70	3	132
Ohio.....	25	19, 319	8	10	33	19, 329
Oklahoma.....	2	26	1	1	3	27
Oregon.....	2	1, 648	4	422	6	2, 070
Pennsylvania.....	33	9, 243	8	169	41	9, 412
Rhode Island.....	2	233	1	1	3	234
South Carolina.....	6	2, 800	1	2	7	2, 802
South Dakota.....			2	5	2	5
Tennessee.....	4	325	2	2	6	327
Texas.....	3	140	2	469	5	609
Utah.....			1	1	1	1
Virginia.....	5	1, 433	1	30	6	1, 463
West Virginia.....	3	1, 584	1	1	4	1, 585
Washington.....	20	16, 359	1	1	21	16, 360
Wisconsin.....	4	285			4	285

Minimum Wages and Maximum Hours

CONTINUANCE OF EXISTING BASIC WORKWEEK UNDER WAGE AND HOUR LAW ¹

THE President of the United States has rejected proposals to lengthen the basic workweek without extra payment for overtime in defense industries subject to the provisions of the Fair Labor Standards Act. In reaching this conclusion on July 12, 1940, the President expressed agreement with a statement contained in a letter of the Administrator of the wage and hour law.

Experience in the World War of 1914-18 was cited by the Administrator to show the harmful effects of excessively long hours. The British Munitions Commission found, for example, that when hours of munition workers were reduced, production increased. In one factory weekly hours of work were reduced from 66 to 55 and finally to 45½. Considering the weekly output under the 66-hour week as 100, the relative yield on a 55-hour week basis was 111, and on a 45½-hour week it amounted to 109.

In the United States the Chief of Ordnance of the Army issued an order on November 15, 1917, stating that vigilance was demanded by all those in any way associated with industry "lest the safeguards with which the people of this country have sought to protect labor should be unwisely and unnecessarily broken down." The order added, "It is a fair assumption that for the most part these safeguards are the mechanisms of efficiency. Industrial history proves that reasonable hours, fair working conditions, and a proper wage scale are essential to high production."

These documents were drafted almost a generation ago, and the Administrator added that production-line techniques have been greatly developed subsequently. Maximum production depends upon the maximum efficiency of machines. This machine efficiency is usually obtained by using relays of workers in shifts, short enough to make constantly intense effort possible.

While the Administrator did not believe it would be necessary to raise the ceiling for hours, above which time and one-half the regular

¹ United States Department of Labor. Wage and Hour Division. Press release No. 900.

rate of wages must be paid, he gave assurance that the President would be advised of any complaints from the key defense industries that payment at overtime rates was making operations difficult. At the time this letter was written only three such complaints, from small establishments, had been received by the Wage and Hour Division.



REST PERIODS PART OF WORKING TIME UNDER WAGE AND HOUR LAW

SHORT rest periods, up to and including 20 minutes, are construed as working time under the provisions of the Fair Labor Standards Act, according to the Administrator.¹ Time allotted for rest must therefore be paid for. When the rest periods customarily taken by employees are longer, final decision on whether or not the employee is to be paid will be in the jurisdiction of the appropriate regional director of the wage and hour law.

In making his decision, the regional director will be guided by a number of considerations. These include freedom of the employee to leave the premises and go where he pleases during the intermission; the length of the intermission, that is, whether sufficient to permit the employee reasonable freedom of action and a real opportunity for relaxation; and whether the intermission is clearly not an attempt to evade or circumvent the provisions of the wage and hour law. If the regional director decides that an intermission shall not be counted as "hours worked," he is required to report to the Administrator on the results of his investigation and the reasons for his decision.

Computations of hours worked under this ruling became effective on April 1, 1940. Deductions for rest periods prior to that date were ordinarily to be allowed to stand.



MINIMUM WAGE FOR BRITISH AGRICULTURAL WORKERS

AN AMENDMENT to the Agricultural Wages (Regulation) Act was adopted on April 25, 1940, which provides for fixing a national minimum wage for men engaged in agriculture in England and Wales.²

Minimum-wage rates have been established by regions since 1924 under the legislation covering agriculture, and the rates have been given statutory effect by orders made by the Central Agricultural Wages Board. Under the terms of the amendment a national minimum wage must be fixed by the Agricultural Wages Board, after con-

¹ U. S. Department of Labor. Wage and Hour Division. Press release No. R-837, June 10, 1940.

² Great Britain. Ministry of Labor Gazette, London, May 1940.

sultation with the agricultural wages committees for the different areas and taking into account general economic conditions and the conditions of the agricultural industry.

Minimum rates established by the wages committees for every county must be sufficient to insure that no man of full age employed whole time by the week, or any longer period, shall receive less than the national minimum wage in respect of any week. However, the Board may fix a lower minimum wage for any county or part of a county, if the wages committee proves this to be justified. Wages committees are also required to take the national minimum wage into account when fixing minimum rates of wages for agricultural workers other than men of full age employed on a full-time basis. Nothing in the law may be construed to interfere with establishing rates of pay above the minimum necessary to secure compliance with its terms.

The Board is empowered to reconsider and alter the national minimum wage, which was fixed at 48s. a week after adoption of the amendment.



LONGER WORKING HOURS IN THE SOVIET UNION

THE 7-hour workday and 5-day workweek formerly prevalent in the Soviet Union was lengthened to a universal 8-hour day and 6-day workweek by a Government decree ("*ukaz*") issued on June 27, 1940.¹

Such a measure had been recommended by the All Union Central Soviet of Labor Unions, which claimed that the war danger for the Soviet Union had increased, so that, "true to its policy of peace it is obliged to strengthen more intensively the economic and defensive power of the country." The labor unions further held that the 5-day workweek reduced output and also constituted a break between city and rural workers, the 6-day workweek having continued to exist in rural areas. Furthermore, from 3 to 4 percent of the Soviet workers, mostly young persons, were moving from factory to factory and undermining labor discipline, did not wish to work honestly, and adopted a negligent attitude toward fulfillment of requirements established by law. The labor unions maintained that such practices could no longer be tolerated, and that workers should not be permitted voluntarily to leave or transfer from one enterprise to another under penalty of trial and imprisonment.

Under the decree, voluntary change of employment is strictly forbidden and unauthorized leave of absence is penalized, not by dismissal as was the practice heretofore, but by corrective labor at the place of employment and by a fine up to 25 percent of wages for 6 months. Furthermore, output standards ("*norms*") of labor are

¹ Data are from reports of the United States Embassy at Moscow, June 26 and 27, 1940.

raised by the decree, and piece rates are lowered in proportion to the increased length of the working day.

The labor unions, through the Soviet dailies in Moscow, stressed the need to strengthen the defenses of the country, as well as the need for more metal, coal, oil, airplanes, machine tools, automobiles, etc., and also strongly urged all workers to put forth every effort to increase labor productivity.

Wages and Hours of Labor

EARNINGS AND HOURS IN THE IRON AND STEEL INDUSTRY, APRIL 1938¹

PART 1—HOURLY EARNINGS

Summary

THE relatively high level of wages in the iron and steel industry is clearly indicated by the over-all average hourly earnings of the industry. In April 1938, iron and steel workers earned an average of 83.9 cents an hour. All but 10.4 percent of these workers earned at least 62.5 cents an hour, and over one-half (51.2 percent) earned at least 77.5 cents an hour.

Although 10.4 percent of the workers averaged less than 62.5 cents an hour, less than 1 percent (0.4) had earnings under 40 cents an hour and less than one-tenth of 1 percent had earnings under 30 cents an hour. It is evident, therefore, that only very minor adjustments in the wage structure were necessary to meet the minimum-wage requirements of the Fair Labor Standards Act.² Moreover, on the basis of the 1938 wage structure, it would be necessary to increase the wages of only 0.4 percent of the workers in order to comply with the highest minimum which can be set under the act, namely 40 cents an hour.

In April 1938, iron and steel workers were employed an average of 28.5 hours per week. Their average weekly earnings amounted to \$23.96. The foregoing facts are based on a detailed survey of wages and hours made by the Bureau of Labor Statistics in the spring of 1938. The survey covered a total of 81,217 wage earners in 276 iron and steel plants.

Scope and Method

DEFINITION OF THE INDUSTRY

The iron and steel industry may be variously defined. A narrow definition of the industry would include only those branches engaged in the manufacture of crude iron and steel and of rolled products. These branches constitute the "basic" group, which includes blast

¹ Prepared by Victor S. Baril, assisted by Abner C. Lakenan, of the Bureau's Division of Wage and Hour Statistics.

² The 25-cent minimum went into effect in October 1938 and the 30-cent minimum in October 1939.

furnaces, steel works, and rolling mills. Also included in this group are those departments operated in connection with rolling mills further to process the rolled products, such as wrought pipe, bolts and nuts, etc. According to the 1937 Census of Manufactures there were 497 establishments in this group, with an annual output valued at \$5,000 or more. These establishments had an average monthly employment of 502,417 wage earners.

SCOPE OF SURVEY

In its survey of the iron and steel industry the Bureau of Labor Statistics covered practically all the branches in the basic group; that is, blast furnaces, steel works, and rolling mills. These three branches are complementary. This no doubt explains the high degree of integration found in this group. In a number of establishments, generally the large ones, all three branches are found. In others, steel works are operated in conjunction with rolling mills. Some establishments do, however, specialize in operating either blast furnaces or rolling mills. Rarely, however, are steel works operated by themselves. The close relationship of these three branches is further confirmed by the fact that more than 4 out of every 5 tons of pig iron produced by blast furnaces in 1937 were consumed in other plants (generally steel mills) of the same company or affiliated companies, and that less than 1 percent of the ingots produced in steel mills were made for sale, practically all of them being consumed in the same works (generally in the rolling mills) in which they were produced.

Processing departments are often operated in rolling mills or in plants adjacent to these mills. Not all of these processing departments, however, constitute integral parts of the rolling-mill branch of the industry. Some types of processing are carried on to a considerable extent in establishments outside of the basic industry. It was decided, therefore, to include in the present survey only those important processing departments which are closely related to rolling mills. These are butt- and lap-welded tube mills, seamless-tube mills, and wire-drawing departments.

Along with establishments in the basic group, the Bureau also covered those independent establishments engaged in the manufacture of finished iron and steel products included in the scope of the survey. Thus, wire drawn from purchased rods and also independent tube mills were covered.

The coverage of the survey by departments is indicated in table 1. It will be seen that 276 plants were covered.

The geographical distribution of the sample is indicated in tables 1 and 2. It will be seen that 23 States were covered.

The geographical classification of the data used in the present report differs somewhat from that followed in previous surveys. Instead of the four districts formerly used,³ the Bureau adopted three broad regions, namely the North, the South, and the West. The Northern region, by far the largest of the three, was further divided into five divisions as follows: Eastern, Pittsburgh-Youngstown, Lake Erie, Chicago-Gary, and Inland. Essentially the change involved the breaking down into smaller divisions of the Great Lakes and middle western district, which extended from western New York to Colorado, the reclassification of a few centers of production, and finally the setting up of a western region comprising the Southwest and the Pacific coast. The latter territory was covered for the first time in the present survey.⁴

TABLE 1.—Coverage of 1938 Survey of the Iron and Steel Industry, by Departments

Department	Number of plants (departments)	Number of States	Number of wage earners
Total, all departments.....	276	23	81,217
Blast furnaces.....	18	8	5,996
Steel works.....	44	13	11,457
Bessemer converters.....	5	3	813
Open-hearth furnaces.....	27	11	9,784
Electric furnaces.....	12	7	860
Rolling mills.....	214	23	63,764
Puddling mills.....	5	4	355
Bloomers mills.....	26	10	3,728
Billet mills.....	14	9	1,055
Plate mills.....	14	6	3,487
Rail mills.....	6	6	1,110
Structural mills.....	5	3	1,169
Bar mills.....	46	16	5,068
Rod mills.....	15	12	1,860
Wire mills.....	19	13	4,603
Skelp mills.....	4	3	491
Lap-weld tube mills.....	4	3	1,994
Butt-weld tube mills.....	7	5	2,698
Seamless tube mills.....	5	3	2,726
Sheet- and tin-bar mills.....	10	7	975
Strip mills (wide).....	12	8	11,107
Sheet mills.....	14	10	10,443
Tin mills.....	8	7	10,895

³ These were the eastern, the Pittsburgh, the Great Lakes and middle western, and the southern districts.

⁴ The eastern division is the same as in former surveys. It embraces Massachusetts, Rhode Island, Connecticut, Delaware, New Jersey, the eastern half of New York and of Pennsylvania, and the territory in and around Baltimore. The Pittsburgh-Youngstown division includes all of the old Pittsburgh district plus some centers in the vicinity of Youngstown which in former surveys had been classified in the Great Lakes and middle western district. The Lake Erie division, which was formerly included in the Great Lakes and middle western district, embraces all of western New York, the Lake counties of Ohio, and the territory in and around Detroit. The Chicago-Gary division, which was also included in former surveys in the Great Lakes and middle western district, covers all operations in and around Chicago, Ill., and Gary, Ind. Also included in this division are the isolated operations in northwestern Illinois and in Minnesota. The inland division is made up of the remaining producing centers in the North. With the exception of the mills in Kentucky, all of the mills in the inland division were formerly classified in the Great Lakes and middle western district. The inland division extends from Ashland, Ky., to Kansas City, Mo. It includes those mills along the Ohio River in both Kentucky and Ohio, those mills in central and southern Ohio not included in the Pittsburgh-Youngstown or the Lake Erie divisions, those mills in the central and southern sections of Illinois and Indiana not included in the Chicago-Gary division, and all the mills in Missouri. The Southern region differs from the district formerly used in that it does not include the Kentucky mills located along the Ohio. The Western region is made up of the mills in the Southwest and also those on the Pacific coast. The latter mills were covered for the first time in connection with the 1938 survey.

It should be remembered that the sample was selected on the basis of department and not of firm nor of works. A firm may have several works (i. e., separate establishments or operations) and each of these works may in turn have several departments. As a rule, only certain departments were covered in any of these works. For that reason, the term "plant" or "establishment," whenever used in this article, will be construed to mean department, such as open-hearth furnaces, blooming mills, etc.,—and not complete operations or works embracing a number of departments.

TABLE 2.—*Coverage of 1938 Survey of the Iron and Steel Industry, by Region and Division*

Region and division	Number of plants (departments)	Number of wage earners
United States.....	276	81,217
North.....	232	74,325
Eastern division.....	56	9,927
Pittsburgh-Youngstown division.....	83	35,284
Lake Erie division.....	37	9,251
Chicago-Gary division.....	31	14,302
Inland division.....	25	5,561
South.....	25	4,200
West.....	19	2,632

NATURE OF DATA OBTAINED

The data collected related to wages and hours, annual earnings, and general plant conditions. These were obtained by field representatives of the Bureau, who visited the establishments included in the sample.

The wages and hours data were transcribed from the time and pay-roll records of the establishments covered. All employees in the plant, except strictly supervisory employees, were included. For each such worker information was obtained regarding occupational designation, sex, color, method of wage payment, actual hours worked and total earnings for one pay-roll period, and total earnings made and pay-roll periods worked in 1937. Occupational descriptions were generally obtained from plant supervisors. Plant officials furnished the general plant information pertaining to such items as employer-employee relations, methods of wage payment, corporate affiliation, etc.

In most cases the pay-roll period covered was one in April. Of the 276 plants furnishing information, 231 reported for a pay-roll period in April and 29 for a period in March. No information was obtained for a pay-roll period prior to January or later than September 1938.

The detailed wages and hours data obtained were used to compute averages and prepare frequency distributions on hourly earnings, weekly hours, and weekly earnings. These were compiled for the industry as a whole, as well as for each branch and department, by region, sex, skill, and occupation.

Occupations were classified according to skill on the basis of the information submitted by the field representatives of the Bureau. The skill information was obtained from plant officials and supervisors.

Average Hourly Earnings

SUMMARY FOR ALL WORKERS

In terms of hourly earnings, wage earners employed in the iron and steel industry are among the highest paid factory workers in the country. In April 1938 the over-all average hourly earnings of the 81,217 wage earners employed in the 276 establishments for which data were obtained amounted to 83.9 cents an hour. This average is approximately one-fourth above the average for all manufacturing industries and one-seventh above that for the "durable goods" group of industries.

Earnings varied widely between plants, the averages ranging from 38.3 cents to \$1.212. It will be seen from table 3 that the individual plant averages are widely scattered between these two extremes. The heaviest concentration, 220 out of 276 plants, occurred between 72.5 cents and \$1.00. There were also 38 plants with earnings ranging from 57.5 to 72.5 cents. Only 5 plants averaged less than 57.5 cents. On the other hand, 13 plants averaged \$1.00 or over.

TABLE 3.—*Distribution of Individual Plants in the Iron and Steel Industry, by Average Hourly Earnings and by Region, April 1938*

Average hourly earnings	United States	North						West	South
		Total	East- ern divi- sion	Pitts- burgh- Youngs- town divi- sion	Lake Erie divi- sion	Chicago- Gary divi- sion	In- land divi- sion		
Total plants.....	276	232	56	83	37	31	25	19	25
37.5 and under 42.5 cents.....	1								1
42.5 and under 47.5 cents.....	1								1
47.5 and under 52.5 cents.....	1								1
52.5 and under 57.5 cents.....	2	2	2						
57.5 and under 62.5 cents.....	12	2					2		10
62.5 and under 67.5 cents.....	9	7	4		3				2
67.5 and under 72.5 cents.....	17	15	10	1	3		1		2
72.5 and under 77.5 cents.....	32	27	8	10	3	4	2	1	4
77.5 and under 82.5 cents.....	56	53	13	24	4	7	5	2	1
82.5 and under 87.5 cents.....	58	54	8	23	11	9	3	3	1
87.5 and under 92.5 cents.....	44	39	9	18	4	5	3	3	2
92.5 and under 100.0 cents.....	30	24	1	5	8	6	4	6	
100.0 and under 110.0 cents.....	7	4	1	1	1		1	3	
110.0 and under 120.0 cents.....	5	4					4	1	
120.0 cents and over.....	1	1		1					

Despite the wide dispersion of the plant averages, the average hourly earnings of individual workers displayed a pronounced central tendency. This may be seen from the distribution presented in table 4.

Approximately one-sixth of the workers (16.2 percent) averaged between 62.5 and 67.5 cents. The fact that the lower limit of this interval coincides to a considerable extent with the common-labor rate in effect for the majority of the workers in the northern region largely explains this concentration. Other important concentrations occurred in the three 5-cent intervals immediately above the modal class, approximately one-eighth (11.9 percent) of the workers earning between 67.5 and 72.5 cents, slightly more than one-tenth (10.3 percent) between 72.5 and 77.5 cents, and nearly one-tenth (9.6 percent) between 77.5 and 82.5 cents. Thus, nearly one-half of the workers (48.0 percent) were found within the 20-cent range from 62.5 to 82.5 cents.

Further evidence of the high wage level of the iron and steel industry is the fact that over two-fifths of the workers (41.6 percent) averaged 82.5 cents or more per hour. Thus, over one-fifth (22.8 percent) of the workers had hourly earnings ranging from 82.5 cents to \$1.00, one-tenth (10.6 percent) earnings from \$1.00 to \$1.20, and about one-twelfth (8.2 percent) earnings from \$1.20 upward.⁶

It will be noted that only slightly more than one-tenth of the workers (10.4 percent) earned under 62.5 cents and only 2.7 percent under 52.5 cents. Furthermore, less than 1 percent of the workers (0.4) earned less than 40 cents an hour and less than one-tenth of 1 percent less than 30 cents.

TABLE 4.—*Distribution of Workers in the Iron and Steel Industry, by Average Hourly Earnings, April 1938*

Average hourly earnings (cents)	Num- ber of work- ers	Simple per- centage	Cum- lative per- centage	Average hourly earnings (cents)	Num- ber of work- ers	Simple per- centage	Cum- lative per- centage
Total workers.....	81,217	100.0	-----	82.5 and under 87.5.....	6,714	8.3	66.7
Under 30.0.....	10	(¹)	(¹)	87.5 and under 92.5.....	5,648	7.0	73.7
30.0 and under 32.5.....	80	0.1	0.1	92.5 and under 100.0.....	6,075	7.5	81.2
32.5 and under 35.0.....	26	(¹)	.1	100.0 and under 110.0.....	5,200	6.4	87.6
35.0 and under 37.5.....	137	.2	.3	110.0 and under 120.0.....	3,401	4.2	91.8
37.5 and under 40.0.....	121	.1	.4	120.0 and under 130.0.....	2,270	2.8	94.6
40.0 and under 42.5.....	248	.3	.7	130.0 and under 140.0.....	1,248	1.5	96.1
42.5 and under 47.5.....	605	.7	1.4	140.0 and under 150.0.....	831	1.0	97.1
47.5 and under 52.5.....	1,096	1.3	2.7	150.0 and under 160.0.....	534	.7	97.8
52.5 and under 57.5.....	2,639	3.2	5.9	160.0 and under 170.0.....	493	.6	98.4
57.5 and under 62.5.....	3,642	4.5	10.4	170.0 and under 180.0.....	368	.5	98.9
62.5 and under 67.5.....	13,083	16.2	26.6	180.0 and under 190.0.....	290	.4	99.3
67.5 and under 72.5.....	9,685	11.9	38.5	190.0 and under 200.0.....	151	.2	99.5
72.5 and under 77.5.....	8,399	10.3	48.8	200.0 and under 220.0.....	199	.2	99.7
77.5 and under 82.5.....	7,758	9.6	58.4	220.0 and under 240.0.....	115	.1	99.8
				240.0 and over.....	151	.2	100.0

¹ Less than a tenth of 1 percent.

The extreme range in the individual averages (from less than 30 cents to over \$2.40) is, to a very large extent, due to the fact that over one-half of the employees were either piece or bonus workers, the

⁶ Only 2.9 percent, however, earned as much as \$1.50 and only six-tenths of 1 percent as much as \$2.00 an hour.

remainder being time workers. Of the 81,217 workers covered, 47.0 percent were time workers, 38.9 percent piece (tonnage) workers, and 14.1 percent bonus workers.⁷ The earnings of piece and bonus workers are subject to much wider fluctuations than the earnings of time workers.

Skill exerts a very important influence on the wage structure of the industry. First of all, it accounts for much of the dispersion in the earnings of iron and steel workers. Thus, there was a gap of 30.3 cents between the average hourly earnings of unskilled workers (68.9 cents) and those of skilled workers (99.2 cents). The earnings of semiskilled workers (79.3 cents) were 10.4 cents above those of unskilled workers, but 19.9 cents below those of skilled workers. Moreover, the skill composition of the labor force is to a considerable extent responsible for the high level of wages in the industry. Thus, only one-fourth of the workers (25.6 percent) were unskilled, while two-fifths (40.7 percent) were semiskilled and one-third (33.7 percent) skilled.

Closely allied with skill in influencing the wage structure of the industry is method of wage payment. Piece and bonus workers earn substantially more per hour than do time workers. Their earnings are also subject to wider fluctuations. It is significant, therefore, that nearly three-fifths of the skilled workers (58.2 percent) and well over one-half (55.8 percent) of the semiskilled were either piece or bonus workers. The opposite, however, was true of unskilled workers, of whom 58.3 percent were time workers and 41.7 percent either piece or bonus workers.

Sex is also a factor contributing to the high level of wages in the industry. Iron and steel is essentially a man's industry, as indicated by the fact that less than 1 percent (0.6) of the employees covered in the survey were females. Few jobs in the industry can be filled by females. Of these the most important by far is that of tin-plate assorting in tin mills, a semiskilled occupation to which women are especially adapted. For the industry as a whole, male workers earned an average of 84.1 cents an hour as against 57.8 cents for females.

HOURLY EARNINGS OF MALE WORKERS, BY SKILL

Inasmuch as iron and steel workers are overwhelmingly male, it is only natural that the distribution of hourly earnings of all males (see table 5) should follow very closely that of all workers. The differences are insignificant, involving a shift of less than 1 percent of the workers about the modal class. Thus, by comparison with the distribution of all workers, there were 0.5 percent fewer males in the 10-cent interval from 52.5 to 62.5 cents (most of the

⁷ Piece workers averaged 94.7 cents per hour, bonus workers 92.2 cents, and time workers only 73.1 cents.

females are found within this range), and 0.5 percent more males in the 15-cent interval from 62.5 to 77.5 cents. Otherwise, the respective percentage distributions are identical.

It is evident from the modal concentration, as well as from the general concentration about the modal class, that the central tendency in the individual averages in each skill group varied indirectly with the skill of the group. The level of concentration, however, varied directly with the skill of the group, being highest for the skilled and lowest for the unskilled workers. Thus, only 11.5 percent of the skilled workers were found in the modal class of 82.5 and under 87.5 cents, in contrast to 17.2 percent of the semiskilled in the modal class of 67.5 and under 72.5 cents, and 37.7 percent of the unskilled in the modal class of 62.5 and under 67.5 cents. Much the same is true of the concentrations about the respective modal classes. For example, only 40 percent of the skilled were found within the 20-cent range from 72.5 to 92.5 cents, by comparison to 56.1 percent of the semiskilled in the 20-cent range from 62.5 to 82.5 cents, and 67.2 percent of the unskilled in the 20-cent range from 57.5 to 77.5 cents.

TABLE 5.—*Distribution of Male Workers in the Iron and Steel Industry, by Average Hourly Earnings and by Skill, April 1938*

Average hourly earnings	Total workers		Skilled workers		Semiskilled workers		Unskilled workers	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total workers.....	80,711	100.0	27,320	100.0	32,594	100.0	20,797	100.0
Under 30.0 cents.....	10	(1)	—	—	2	(1)	8	(1)
30.0 and under 32.5 cents.....	80	0.1	3	(1)	29	0.1	48	0.2
32.5 and under 35.0 cents.....	26	(1)	6	(1)	14	(1)	6	(1)
35.0 and under 37.5 cents.....	136	.2	6	(1)	23	.1	107	.5
37.5 and under 40.0 cents.....	119	.1	13	(1)	55	.2	51	.2
40.0 and under 42.5 cents.....	247	.3	27	0.1	63	.2	157	.8
42.5 and under 47.5 cents.....	600	.7	57	.2	159	.5	384	1.8
47.5 and under 52.5 cents.....	1,089	1.3	116	.6	468	1.4	505	2.4
52.5 and under 57.5 cents.....	2,281	2.8	184	.7	727	2.2	1,370	6.6
57.5 and under 62.5 cents.....	3,536	4.4	370	1.4	1,414	4.3	1,752	8.4
62.5 and under 67.5 cents.....	13,069	16.3	883	3.2	4,371	13.5	7,815	37.7
67.5 and under 72.5 cents.....	9,683	12.1	1,381	5.1	5,586	17.2	2,716	13.2
72.5 and under 77.5 cents.....	8,397	10.5	2,241	8.2	4,521	14.0	1,635	7.9
77.5 and under 82.5 cents.....	7,757	9.6	2,877	10.5	3,730	11.4	1,150	5.5
82.5 and under 87.5 cents.....	6,712	8.3	3,168	11.5	2,701	8.3	843	4.1
87.5 and under 92.5 cents.....	5,645	7.0	2,689	9.8	2,225	6.8	731	3.5
92.5 and under 100.0 cents.....	6,075	7.5	3,357	12.3	2,084	6.4	634	3.0
100.0 and under 110.0 cents.....	5,199	6.4	2,890	10.6	1,945	6.0	364	1.8
110.0 and under 120.0 cents.....	3,400	4.2	2,057	7.5	1,084	3.3	259	1.2
120.0 and under 130.0 cents.....	2,270	2.8	1,444	5.3	700	2.1	126	.6
130.0 and under 140.0 cents.....	1,248	1.5	889	3.3	324	1.0	35	.2
140.0 and under 150.0 cents.....	831	1.0	617	2.3	177	.5	37	.2
150.0 and under 160.0 cents.....	534	.7	443	1.6	82	.3	9	(1)
160.0 and under 170.0 cents.....	493	.6	438	1.6	46	.1	9	(1)
170.0 and under 180.0 cents.....	368	.5	312	1.1	35	.1	21	.1
180.0 and under 190.0 cents.....	290	.4	252	.9	13	(1)	25	.1
190.0 and under 200.0 cents.....	151	.2	141	.5	10	(1)	—	—
200.0 and under 220.0 cents.....	199	.2	194	.7	5	(1)	—	—
220.0 and under 240.0 cents.....	115	.1	114	.4	1	(1)	—	—
240.0 cents and over.....	151	.2	151	.6	—	—	—	—

¹ Less than a tenth of 1 percent.

Quite naturally, the number of skilled workers in the upper wage brackets exceeded by a wide margin that of the semiskilled and the unskilled workers. Thus, 70 percent of all the skilled workers earned 82.5 cents or more and well over one-third (36.4 percent) earned \$1 or more. In contrast, only 34.9 percent of the semiskilled and 14.8 percent of the unskilled averaged 82.5 cents or better an hour, and only 13.4 percent of the former and 4.2 percent of the latter as much as \$1 an hour.

Not much more than one-fourth of the skilled workers (27 percent) were found in the intermediate wage brackets, i. e., those ranging from 62.5 to 82.5 cents. However, well over one-half of the semiskilled (56.1 percent) and not far from two-thirds of the unskilled (64.3 percent) workers had earnings within this 20-cent range. The former were well distributed among the four 5-cent intervals within this range, while the latter were very largely concentrated in the lower wage classes in this range, particularly in the 5-cent interval from 62.5 to 67.5 cents where 37.7 percent of all the unskilled were found. The sharpness of the latter concentration is due to the fact that the lower limit of the class coincides with a widely accepted common-labor rate.

Unskilled workers accounted for the major share of the iron and steel workers earning less than 62.5 cents an hour. One-fifth of the unskilled (20.9 percent) averaged less than 62.5 cents, compared to 9 percent of the semiskilled and only 3 percent of the skilled workers. It should be pointed out, however, that only 5.9 percent of the unskilled earned less than 52.5 cents and less than 1 percent (0.9) under 40 cents an hour.

HOURLY EARNINGS OF FEMALE WORKERS

As previously stated, there are few females employed in iron and steel establishments. All but 2 of the 506 females covered in the present survey were found in tin-plate mills and most of them were employed as assorters of tin plate. Female workers earned an average of 57.8 cents an hour, or 26.3 cents less than male workers.

The average hourly earnings of female workers, unlike those of male workers, were confined to extremely narrow limits, as may be seen from the distribution in table 6. Seven out of every 10 females (70.7 percent) averaged between 52.5 and 57.5 cents an hour and 9 out of every 10 (91.6 percent) between 52.5 and 62.5 cents. While only 3.2 percent earned less than 52.5 cents, there were also only 2.4 percent who earned as much as 67.5 cents.

TABLE 6.—*Distribution of Female Workers in the Iron and Steel Industry, by Average Hourly Earnings, April 1938*

Average hourly earnings	Number of workers	Percent of workers
Total workers.....	506	100.0
Under 52.5 cents.....	16	3.2
52.5 and under 57.5 cents.....	358	70.7
57.5 and under 62.5 cents.....	106	20.9
62.5 and under 67.5 cents.....	14	2.8
67.5 cents and over.....	12	2.4

REGIONAL VARIATIONS

To some extent the dispersion in the average hourly earnings of iron and steel workers is due to regional variations. For purposes of comparison, the country has been divided into three broad regions, namely the North, the West, and the South, and the information collected has been classified according to these regions.

The distribution of individual plants according to average hourly earnings (see table 3) indicates quite definitely that each region has a distinctive wage structure. Despite some overlapping, it is evident that the highest wage level is found in the West and the lowest in the South, the northern wage level being somewhat lower than the former, yet substantially higher than the latter. Of the 19 western plants, 6 had over-all average hourly earnings ranging from 92.5 cents to \$1.00, 12 had averages from 87.5 cents to \$1.10, and 15 had averages from 82.5 cents to \$1.10. No plant in the West averaged less than 72.5 cents, while 1 averaged between \$1.10 and \$1.20. In the North, plant averages varied much more than in the West, ranging all the way from 52.5 cents to over \$1.20. Of the 232 plants surveyed in this region, however, 107 were found within the 10-cent range from 77.5 to 87.5 cents, 173 within the 20-cent spread from 72.5 to 92.5 cents, and all but 20 within the range from 67.5 cents to \$1.00. Despite the wide scatter in the averages of the 25 southern plants (from 37.5 to 92.5 cents), 10 were found within the 5-cent interval from 57.5 to 62.5 cents, 14 within the 15-cent interval from 57.5 to 72.5 cents, and 18 within the 20-cent interval from 57.5 to 77.5 cents.

Further evidence that each region has a wage structure all its own may be had from the over-all regional averages which appear in table 7. It will be seen that average hourly earnings were highest in the West, 92.3 cents, and lowest in the South, 66 cents, with the northern average, 84.7 cents, more closely approximating the western than the southern average.

TABLE 7.—Average Hourly Earnings in the Iron and Steel Industry, by Region, Division, and Skill, April 1938

Region and division	Total workers		Skilled workers		Semiskilled workers		Unskilled workers	
	Num- ber	Aver- age hourly earn- ings	Num- ber	Aver- age hourly earn- ings	Num- ber	Aver- age hourly earn- ings	Num- ber	Aver- age hourly earn- ings
United States.....	81,217	\$0.839	27,338	\$0.992	33,074	\$0.793	20,805	\$0.689
North.....	74,325	.847	25,025	.992	30,321	.802	18,979	.703
Eastern division.....	9,927	.778	3,797	.917	3,544	.729	2,586	.629
Pittsburgh-Youngstown division.....	35,284	.858	11,550	1.003	14,736	.812	8,998	.718
Lake Erie division.....	9,251	.825	3,121	.968	3,638	.781	2,492	.691
Chicago-Gary division.....	14,302	.857	4,582	.998	6,092	.815	3,628	.726
Inland division.....	5,561	.918	1,975	1.098	2,311	.858	1,275	.719
West.....	2,632	.923	1,008	1.137	986	.829	638	.713
South.....	4,260	.660	1,305	.854	1,767	.622	1,188	.489

The respective wage levels of the three regions are clearly indicated by the frequency distributions of workers according to average hourly earnings, which are presented in table 8. On the one hand, the comparatively low wage level of the industry in the South is quite evident, over one-third of the workers in that region (35.3 percent) earning under 52.5 cents an hour, well over one-half (54.0 percent) less than 62.5 cents, and all but 19.4 percent under 82.5 cents. Less than one-tenth of the workers in the South (9.3 percent) earned as much as \$1 an hour. On the other hand, in both the North and the West, relatively few workers were found in the lower wage brackets. Only 1.0 percent of the northern workers and less than 1 percent (0.5) of the western workers earned less than 52.5 cents an hour, and only 8.0 and 8.8 percent, respectively, received under 62.5 cents. Though not as sharply drawn as in the case of the South, the line of demarcation between the northern and the western wage levels is nevertheless indicated by the fact that over one-half of the workers in the West (52.3 percent) earned 82.5 cents or more an hour, while not much more than two-fifths of the workers in the North (42.2 percent) had such earnings. Specifically, there were by comparison to the North relatively fewer workers in the West (45.3, compared to 58.4 percent) in the wage intervals between 62.5 and 87.5 cents, but relatively more (45.9, in comparison to 33.6 percent) in the intervals from 87.5 cents to \$2.40 and over.

TABLE 8.—Percentage Distribution of Workers in the Iron and Steel Industry, by Average Hourly Earnings, and by Region and Skill, April 1938

Average hourly earnings	United States				Northern region			
	Total	Skilled	Semi-skilled	Unskilled	Total	Skilled	Semi-skilled	Unskilled
Under 30.0 cents	(1)		(1)	(1)	(1)		(1)	(1)
30.0 and under 32.5 cents	0.1	(1)	0.1	0.2	(1)		(1)	
32.5 and under 35.0 cents	(1)	(1)	(1)	(1)	(1)	(1)	(1)	
35.0 and under 37.5 cents	.2	(1)	.1	.5	(1)	(1)	(1)	(1)
37.5 and under 40.0 cents	.1	(1)	.2	.2	(1)	(1)	0.1	(1)
40.0 and under 42.5 cents	.3	0.1	.2	.8	0.1	(1)	.1	0.2
42.5 and under 47.5 cents	.7	.2	.5	1.9	.3	0.1	.2	.5
47.5 and under 52.5 cents	1.3	.4	1.4	2.4	.6	.2	.6	1.2
52.5 and under 57.5 cents	3.2	.7	3.3	6.6	2.9	.4	2.7	6.7
57.5 and under 62.5 cents	4.5	1.4	4.6	8.4	4.1	1.2	4.1	8.0
62.5 and under 67.5 cents	16.2	3.3	13.2	37.7	16.7	3.2	13.1	40.0
67.5 and under 72.5 cents	11.9	5.1	17.0	13.2	12.4	5.0	17.5	13.9
72.5 and under 77.5 cents	10.3	8.2	13.7	7.9	10.8	8.3	14.3	8.3
77.5 and under 82.5 cents	9.6	10.5	11.3	5.5	9.9	10.8	11.7	5.8
82.5 and under 87.5 cents	8.3	11.6	8.2	4.1	8.6	12.0	8.6	4.2
87.5 and under 92.5 cents	7.0	9.8	6.7	3.5	7.1	10.0	6.9	3.8
92.5 and under 100.0 cents	7.5	12.3	6.3	3.0	7.7	12.6	6.6	3.1
100.0 and under 110.0 cents	6.4	10.6	5.9	1.7	6.5	10.6	6.1	1.8
110.0 and under 120.0 cents	4.2	7.5	3.3	1.2	4.3	7.6	3.3	1.3
120.0 and under 130.0 cents	2.8	5.3	2.1	.6	2.8	5.3	2.1	.6
130.0 and under 140.0 cents	1.5	3.3	1.0	.2	1.5	3.2	1.0	.2
140.0 and under 150.0 cents	1.0	2.3	.5	.2	1.0	2.2	.6	.2
150.0 and under 160.0 cents	.7	1.6	.2	(1)	.6	1.6	.2	(1)
160.0 and under 170.0 cents	.6	1.6	.1	(1)	.6	1.6	.1	(1)
170.0 and under 180.0 cents	.5	1.1	.1	.1	.5	1.1	.1	.1
180.0 and under 190.0 cents	.4	.9	(1)	.1	.3	.9	(1)	.1
190.0 and under 200.0 cents	.2	.5	(1)		.2	.5	(1)	
200.0 and under 220.0 cents	.2	.7	(1)		.2	.7	(1)	
220.0 and under 240.0 cents	.1	.4	(1)		.1	.4	(1)	
240.0 cents and over	.2	.6			.2	.5		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	81, 217	27, 338	33, 074	20, 805	74, 325	25, 025	30, 321	18, 979

Average hourly earnings	Western region				Southern region			
	Total	Skilled	Semi-skilled	Unskilled	Total	Skilled	Semi-skilled	Unskilled
Under 30.0 cents					0.2			0.6
30.0 and under 32.5 cents					1.7	0.2	1.2	4.0
32.5 and under 35.0 cents					.4	.1	.5	.5
35.0 and under 37.5 cents					2.9	.3	.7	8.8
37.5 and under 40.0 cents					2.3	.7	2.2	4.1
40.0 and under 42.5 cents					4.0	1.2	2.2	9.6
42.5 and under 47.5 cents	(1)			0.2	9.5	2.0	5.4	24.3
47.5 and under 52.5 cents	0.5			2.0	14.3	4.2	17.1	21.7
52.5 and under 57.5 cents	.5		0.1	1.9	10.1	6.5	14.7	7.5
57.5 and under 62.5 cents	7.8	0.1	1.5	29.6	8.6	6.1	14.1	3.2
62.5 and under 67.5 cents	16.3	.8	24.3	28.3	8.1	6.4	11.0	5.5
67.5 and under 72.5 cents	8.7	3.5	14.6	7.7	7.2	7.1	9.5	4.0
72.5 and under 77.5 cents	8.4	5.3	12.5	7.1	5.2	8.7	4.5	2.6
77.5 and under 82.5 cents	5.5	3.3	8.6	4.4	6.1	11.4	4.9	2.2
82.5 and under 87.5 cents	6.4	7.4	6.6	4.5	3.3	7.0	2.3	.7
87.5 and under 92.5 cents	7.9	12.1	7.6	1.4	3.1	6.0	2.9	.2
92.5 and under 100.0 cents	8.5	12.9	4.5	7.7	3.7	7.7	3.0	.3
100.0 and under 110.0 cents	7.8	12.5	5.9	3.3	3.2	7.6	1.9	.2
110.0 and under 120.0 cents	6.3	10.3	5.8	.9	1.5	3.7	.8	
120.0 and under 130.0 cents	4.0	5.9	4.1	.8	1.6	4.1	.8	
130.0 and under 140.0 cents	2.5	4.2	2.4	.2	.8	2.7		
140.0 and under 150.0 cents	1.5	3.5	.5		.5	1.6	.1	
150.0 and under 160.0 cents	1.7	3.9	.6		.3	.7	.1	
160.0 and under 170.0 cents	1.5	3.8	.2		.3	.9	.1	
170.0 and under 180.0 cents	.8	1.9	.1		.3	.9		
180.0 and under 190.0 cents	1.2	3.1			.1	.4		
190.0 and under 200.0 cents	.6	1.5			.2	.5		
200.0 and under 220.0 cents	.7	1.7	.1		.2	.5		
220.0 and under 240.0 cents	.3	.7			.2	.5		
240.0 cents and over	.6	1.6			.1	.3		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	2, 632	1, 008	986	638	4, 260	1, 305	1, 767	1, 188

¹ Less than a tenth of 1 percent.

Regional fluctuations in earnings also extended to each skill group. Of the skilled workers, those in the West averaged substantially more per hour than those in the North and much more than those in the South, the averages being \$1.137, 99.2 cents, and 85.4 cents, respectively. The earnings of semiskilled and unskilled workers differed comparatively little between the West and the North (82.9 and 80.2 cents, respectively, for semiskilled, and 71.3 and 70.3 cents, respectively, for unskilled). The southern averages, however, were much lower, semiskilled workers earning only 62.2 cents an hour and unskilled workers only 48.9 cents. These variations are further complicated by differences between regions in the skill composition of the labor force. It is noteworthy that the region with the highest wage level—the West—had, by comparison to the other two regions, particularly the South, a substantially higher ratio of skilled workers, but a lower ratio of both semiskilled and unskilled workers.⁸

In appraising the regional influence on the wage structure of the industry, one should bear in mind that the extremely uneven distribution of the iron and steel industry among the three broad regions reduces greatly the influence of some regions on the general wage level of the industry as a whole. Thus, over 90 percent of the wage earners in the industry are found in the North and less than 10 percent in the other two regions. Despite this fact, however, the West and the South, having respectively the highest and lowest wage levels, do exert a definite though not extensive influence on the over-all wage structure of the iron and steel industry.

Altogether 74,325 workers, representing 91.5 percent of the coverage, were in the North. Within this broad region are found a number of important centers of production scattered over a rather wide territory. For purposes of analysis, the North was subdivided into five divisions, namely, Eastern, Pittsburgh-Youngstown, Lake Erie, Chicago-Gary, and Inland.⁹ Average hourly earnings for each of these divisions appear in table 7 and frequency distributions in table 9.

⁸ Of all iron and steel workers in the West, 38.3 percent were skilled, 37.5 percent semiskilled, and 24.2 percent unskilled. The ratios for the South were 30.6, 41.5, and 27.9 percent respectively, and for the North 33.7, 40.8, and 25.5 percent, respectively.

⁹ See page 423 for a description of each of these five divisions.

TABLE 9.—Percentage Distribution of Iron and Steel Workers in the North, by Average Hourly Earnings, and by Division and Skill, April 1938

Average hourly earnings	Total Northern region				Eastern division			
	Total	Skilled	Semi-skilled	Unskilled	Total	Skilled	Semi-skilled	Unskilled
Under 30.0 cents.....	(1)		(1)	(1)				
30.0 and under 32.5 cents.....	(1)		(1)					
32.5 and under 35.0 cents.....	(1)	(1)	(1)					
35.0 and under 37.5 cents.....	(1)	(1)	(1)	(1)				
37.5 and under 40.0 cents.....	(1)	(1)	0.1	(1)	(1)	(1)	(1)	0.1
40.0 and under 42.5 cents.....	0.1	(1)	.1	0.2	0.1	(1)	0.1	.3
42.5 and under 47.5 cents.....	.3	0.1	.2	.5	.8	0.1	.6	2.2
47.5 and under 52.5 cents.....	.6	.2	.6	1.2	2.5	.8	2.5	4.9
52.5 and under 57.5 cents.....	2.9	.4	2.7	6.7	12.1	.9	8.3	33.4
57.5 and under 62.5 cents.....	4.1	1.2	4.1	8.0	11.5	3.4	14.4	19.4
62.5 and under 67.5 cents.....	16.7	3.2	13.1	40.0	11.6	6.9	16.6	11.9
67.5 and under 72.5 cents.....	12.4	5.0	17.5	13.9	11.0	7.2	15.6	10.4
72.5 and under 77.5 cents.....	10.8	8.3	14.3	8.3	8.7	9.1	10.8	5.4
77.5 and under 82.5 cents.....	9.9	10.8	11.7	5.8	9.4	14.0	8.9	3.2
82.5 and under 87.5 cents.....	8.6	12.0	8.6	4.2	7.6	12.1	5.7	3.6
87.5 and under 92.5 cents.....	7.1	10.0	6.9	3.8	5.5	8.6	4.4	2.4
92.5 and under 100.0 cents.....	7.7	12.6	6.6	3.1	6.4	11.6	4.2	1.7
100.0 and under 110.0 cents.....	6.5	10.6	6.1	1.8	4.6	8.2	3.8	.5
110.0 and under 120.0 cents.....	4.3	7.6	3.3	1.3	3.0	6.3	1.3	.2
120.0 and under 130.0 cents.....	2.8	5.3	2.1	.6	2.0	2.9	2.2	.3
130.0 and under 140.0 cents.....	1.5	3.2	1.0	.2	.8	1.8	.4	(1)
140.0 and under 150.0 cents.....	1.0	2.2	.6	.2	.4	1.0	.1	(1)
150.0 and under 160.0 cents.....	.6	1.6	.2	(1)	.5	1.3		
160.0 and under 170.0 cents.....	.6	1.6	.1	(1)	.5	1.2		
170.0 and under 180.0 cents.....	.5	1.1	.1	.1	.3	.8	(1)	
180.0 and under 190.0 cents.....	.3	.9	(1)	.1	.3	.8		
190.0 and under 200.0 cents.....	.2	.5	(1)		.1	.2	.1	
200.0 and under 220.0 cents.....	.2	.7	(1)		.1	.3		
220.0 and under 240.0 cents.....	.1	.4	(1)		.1	.2	(1)	
240.0 cents and over.....	.2	.5			.1	.3		
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	74,325	25,025	30,321	18,979	9,927	3,797	3,544	2,586

Average hourly earnings	Pittsburgh-Youngstown division				Lake Erie division			
	Total	Skilled	Semi-skilled	Unskilled	Total	Skilled	Semi-skilled	Unskilled
Under 30.0 cents.....	(1)		(1)		(1)	(1)	(1)	
30.0 and under 32.5 cents.....	(1)		(1)					
32.5 and under 35.0 cents.....	(1)	(1)	(1)					
35.0 and under 37.5 cents.....	(1)	(1)	0.1					
37.5 and under 40.0 cents.....	0.1	(1)	.1					
40.0 and under 42.5 cents.....	.2	0.1	.1	0.4	(1)			(1)
42.5 and under 47.5 cents.....	.2	.2	.2	.3	0.2	(1)	0.2	0.6
47.5 and under 52.5 cents.....	.2	.1	.2	.1	.9	0.2	.9	1.8
52.5 and under 57.5 cents.....	1.4	.4	2.0	1.5	2.5	.5	3.1	4.0
57.5 and under 62.5 cents.....	2.1	.6	2.2	3.8	6.7	1.5	4.7	16.3
62.5 and under 67.5 cents.....	19.1	2.1	13.2	50.8	15.7	4.0	14.6	31.7
67.5 and under 72.5 cents.....	13.3	4.6	19.5	14.4	12.5	5.6	16.3	15.4
72.5 and under 77.5 cents.....	11.3	8.8	14.9	8.5	12.7	9.3	16.9	10.6
77.5 and under 82.5 cents.....	9.8	10.3	11.8	6.0	9.9	11.6	10.8	6.3
82.5 and under 87.5 cents.....	8.3	12.5	8.1	3.4	8.7	11.4	9.4	3.8
87.5 and under 92.5 cents.....	6.6	10.0	6.3	2.7	8.5	11.5	8.5	4.6
92.5 and under 100.0 cents.....	7.5	12.7	6.4	2.4	6.6	10.5	5.6	3.3
100.0 and under 110.0 cents.....	6.8	10.9	6.5	1.9	5.9	11.8	4.2	1.0
110.0 and under 120.0 cents.....	4.5	8.0	3.5	1.6	3.5	5.4	4.0	.4
120.0 and under 130.0 cents.....	3.3	6.4	2.3	.9	1.1	2.7	.4	.2
130.0 and under 140.0 cents.....	1.7	3.5	1.1	.3	1.6	3.0	.1	
140.0 and under 150.0 cents.....	1.0	2.0	.7	.3	1.2	3.4	.1	
150.0 and under 160.0 cents.....	.6	1.4	.3	.1	.7	2.1	.1	
160.0 and under 170.0 cents.....	.5	1.2	.2	.1	.8	2.3	.1	
170.0 and under 180.0 cents.....	.4	1.0	.2	.2	.2	.7	(1)	
180.0 and under 190.0 cents.....	.4	.9	.1	.3	.1	.4	(1)	
190.0 and under 200.0 cents.....	.2	.6	(1)		.2	.6		
200.0 and under 220.0 cents.....	.3	1.0	(1)		.1	.4		
220.0 and under 240.0 cents.....	.1	.4			.1	.4		
240.0 cents and over.....	.1	.3			.2	.7		
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	35,284	11,550	14,736	8,998	9,251	3,121	3,638	2,492

TABLE 9.—Percentage Distribution of Iron and Steel Workers in the North, by Average Hourly Earnings, and by Division and Skill, April 1938—Continued

Average hourly earnings	Chicago-Gary division				Inland division			
	Total	Skilled	Semi-skilled	Unskilled	Total	Skilled	Semi-skilled	Unskilled
Under 30.0 cents					(1)		(1)	0.1
30.0 and under 32.5 cents								
32.5 and under 35.0 cents								
35.0 and under 37.5 cents								
37.5 and under 40.0 cents					(1)		(1)	
40.0 and under 42.5 cents					(1)		(1)	.1
42.5 and under 47.5 cents	(1)		(1)		(1)		(1)	
47.5 and under 52.5 cents	(1)			(1)	1.5	0.4	1.0	3.8
52.5 and under 57.5 cents	0.7	(1)	1.3	0.4	3.5	.3	1.5	12.1
57.5 and under 62.5 cents	1.1	0.3	.7	3.0	7.3	1.9	8.8	12.9
62.5 and under 67.5 cents	16.9	1.7	11.3	46.2	9.3	4.7	8.7	18.0
67.5 and under 72.5 cents	12.3	3.6	16.9	15.7	8.0	5.5	10.0	8.2
72.5 and under 77.5 cents	11.5	7.3	16.4	8.6	5.5	4.3	6.1	6.2
77.5 and under 82.5 cents	11.2	10.7	15.0	5.7	8.0	6.7	9.0	8.2
82.5 and under 87.5 cents	10.3	14.0	10.4	5.4	8.0	5.6	9.3	9.3
87.5 and under 92.5 cents	8.9	12.2	8.6	5.4	6.8	5.0	7.7	8.0
92.5 and under 100.0 cents	9.7	16.3	7.6	4.6	7.9	6.6	10.1	5.7
100.0 and under 110.0 cents	6.4	10.0	6.0	2.6	9.8	13.6	10.7	3.0
110.0 and under 120.0 cents	4.2	8.1	2.8	1.6	6.8	9.9	6.1	3.1
120.0 and under 130.0 cents	2.2	4.5	1.4	.6	5.8	9.6	5.3	.7
130.0 and under 140.0 cents	1.3	2.7	.9	.1	3.3	6.1	2.7	.2
140.0 and under 150.0 cents	.8	1.9	.4		2.6	5.0	1.9	.4
150.0 and under 160.0 cents	.6	1.7	.1	(1)	1.1	2.2	.7	
160.0 and under 170.0 cents	.6	1.6	.1		1.1	2.9	.3	
170.0 and under 180.0 cents	.5	1.3	.1	.1	1.1	2.9	.1	
180.0 and under 190.0 cents	.3	.8	(1)		.7	1.9	(1)	
190.0 and under 200.0 cents	.1	.2	(1)		.4	1.0	(1)	
200.0 and under 220.0 cents	.2	.5			.3	.7	(1)	
220.0 and under 240.0 cents	.1	.2			.4	1.0		
240.0 cents and over	.1	.4			.8	2.2		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	14,302	4,582	6,062	3,628	5,561	1,975	2,311	1,275

¹ Less than a tenth of 1 percent.

In the North, average hourly earnings varied from 77.8 cents in the East to 91.8 cents in the inland division. Approximately midway between these two averages are found the averages for the other three divisions. It will be noted that average hourly earnings in the two principal divisions of production, namely, Pittsburgh-Youngstown and Chicago-Gary, were only 0.1 cent apart, being 85.8 and 85.7 cents, respectively. In the Lake Erie division, iron and steel workers earned an average of 82.5 cents an hour, or roughly 3 cents less than workers in either the Pittsburgh-Youngstown or the Chicago-Gary divisions.

The differences in average hourly earnings between these 5 subdivisions do not indicate the same sort of consistent differences as are found between, for example, the northern and southern regions. This is most clearly seen from table 3. In the Pittsburgh-Youngstown division more than half the plants average 77.5 to 87.5 cents an hour, and nine-tenths of the plants average 72.5 to 92.5 cents. This is also the range within which the averages of more than two-thirds of the plants in the eastern division fell. On the other hand, there are 10 plants with averages of 67.5 to 72.5 cents and 6 with averages of less than 67.5 cents in the eastern division. These plants with

relatively low averages, as well as the others, are scattered throughout the East. It is these plants that give rise to the lower average for this division.

Similarly, the high average of the inland division, apparently quite like that of the West, reflects apparently the presence of a considerable number of the highest wage levels in the country rather than a regional characteristic. The range of plant averages in this division is extremely wide, whereas in the West there is a clear tendency for the mills as a whole to average more than those in any of the five northern divisions.

VARIATIONS IN AVERAGE HOURLY EARNINGS ACCORDING TO BRANCH OF INDUSTRY

Branch of industry also exerts some influence on the general wage structure. This is clearly indicated by the over-all averages for each branch. The lowest average hourly earnings (73.6 cents) were found in blast furnaces and the highest (87.3 cents) in steel works. The average for rolling mills, 84.4 cents, was only 2.9 cents below that for steel works, but 10.8 cents above that for blast furnaces. The averages by branches are presented in table 10.

TABLE 10.—Average Hourly Earnings in the Iron and Steel Industry, by Branch, Region, and Skill, April 1938

Branch and skill	United States		North		West		South	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
All branches.....	81, 217	\$0. 839	74, 325	\$0. 847	2, 632	\$0. 923	4, 260	\$0. 660
Skilled.....	27, 338	. 992	25, 025	. 992	1, 008	1. 137	1, 305	. 854
Semiskilled.....	33, 074	. 793	30, 321	. 802	986	. 829	1, 767	. 622
Unskilled.....	20, 805	. 689	18, 979	. 703	638	. 713	1, 188	. 489
Blast furnaces.....	5, 596	. 736	4, 746	. 772	214	(1)	1, 036	(1)
Skilled.....	2, 045	. 869	1, 715	. 881	74	(1)	256	(1)
Semiskilled.....	2, 403	. 691	1, 859	. 734	74	(1)	470	(1)
Unskilled.....	1, 548	. 602	1, 172	. 641	66	(1)	310	(1)
Steel works.....	11, 457	. 873	10, 353	. 873	819	. 915	285	(1)
Skilled.....	4, 667	1. 022	4, 232	1. 018	312	1. 086	123	(1)
Semiskilled.....	3, 368	. 821	3, 013	. 822	271	. 861	84	(1)
Unskilled.....	3, 422	. 692	3, 108	. 694	236	. 721	78	(1)
Rolling mills.....	63, 764	. 844	59, 226	. 849	1, 599	. 949	2, 939	. 679
Skilled.....	20, 626	. 999	19, 078	. 998	622	1. 200	926	. 861
Semiskilled.....	27, 303	. 799	25, 449	. 805	641	. 828	1, 213	. 651
Unskilled.....	15, 835	. 698	14, 699	. 709	336	. 713	800	. 494

¹ Plant coverage too small to justify presentation of averages.

Despite the differences in earnings, the influence of each branch varied considerably because of the extremely uneven distribution of workers between branches. Of the three, the rolling-mills branch exerted by far the greatest influence, accounting as it did for over three-fourths (78.5 percent) of the workers. Next in importance was

the steel-works branch, in which 14.1 percent of the workers were found. Blast furnaces had the least influence on the average, the coverage in this branch representing only 7.4 percent of the total number scheduled. Thus, blast furnaces, with the lowest average hourly earnings, and steel works with the highest, carried comparatively little weight as factors affecting wages in the industry.

The respective wage levels of each branch of the industry are indicated by the distributions appearing in table 11. On the one hand, the slightly higher earnings of employees in steel works in comparison with those of employees in rolling mills may be seen from the fact that there were relatively more of the former in the upper wage brackets (45.2 against 42.5 percent earning 82.5 cents or more an hour), but relatively fewer in the lower wage brackets (7.0 compared to 10.3 percent with earnings under 62.5 cents). Moreover, the steel-mills branch also had a slightly greater relative number of workers within the 20-cent range from 62.5 to 82.5 cents (47.8 percent for steel works compared to 47.2 percent for rolling mills). On the other hand, the relatively low earnings found in blast furnaces are indicated by the presence of over one-fifth of the workers (21.2 percent) in the wage classes under 62.5 cents, and also by the fact that slightly less than one-fourth of the workers (24.3 percent) earned as much as 82.5 cents. Well over one-half of all blast-furnace workers (54.5 percent), however, were found within the 20-cent range from 62.5 to 82.5 cents, and slightly over one-fifth (20.6 percent) in the 5-cent modal class of 62.5 and under 67.5 cents.

Much the same situation existed in the earnings of each skill group. In steel works, skilled employees averaged \$1.022 an hour, semiskilled employees 82.1 cents, and unskilled employees 69.2 cents. These earnings are substantially higher (15.3, 13.0, and 9.0 cents respectively) than those of workers of corresponding skill classifications in blast furnaces, but not much different from those in rolling mills. By comparison to rolling-mill workers, both skilled and semiskilled workers in steel works earned slightly more per hour (2.3 and 2.2 cents respectively), but unskilled workers earned less (10.6 cents).

The influence of branch of the industry is somewhat affected by variations in the skill composition of the labor force. It will be seen that there was a substantially higher ratio of skilled workers in steel works than in either blast furnaces or rolling mills, the respective percentages being 40.7, 34.1, and 32.4. This is especially significant in view of the high average hourly earnings of skilled employees in steel works. In the semiskilled group there were, relatively speaking, fewer steel-works employees (29.4 percent), but substantially more blast-furnace (40.1 percent) and rolling-mill (42.8 percent) employees. The high ratios of semiskilled workers in blast furnaces and rolling mills no doubt account for much of the dispersion in the earnings of

TABLE 11.—Percentage Distribution of Workers in the Iron and Steel Industry, by Average Hourly Earnings and by Branch and Skill, April 1938

Average hourly earnings	All branches				Blast furnaces			
	All workers	Skill-ed	Semi-skill-ed	Un-skill-ed	All workers	Skill-ed	Semi-skill-ed	Un-skill-ed
Under 30.0 cents.....	(1)		(1)	(1)				
30.0 and under 32.5 cents.....	0.1	(1)	0.1	0.2				
32.5 and under 35.0 cents.....	(1)	(1)	(1)	(1)				
35.0 and under 37.5 cents.....	.2	(1)	.1	.5				
37.5 and under 40.0 cents.....	.1	(1)	.2	.2	(1)			0.1
40.0 and under 42.5 cents.....	.3	0.1	.2	.8	1.2		0.4	3.9
42.5 and under 47.5 cents.....	.7	.2	.5	1.9	3.2	0.1	1.5	9.9
47.5 and under 52.5 cents.....	1.3	.4	1.4	2.4	3.0	.5	4.5	4.1
52.5 and under 57.5 cents.....	3.2	.7	3.3	6.6	5.5	1.2	6.4	9.8
57.5 and under 62.5 cents.....	4.5	1.4	4.6	8.4	8.3	.9	6.9	20.2
62.5 and under 67.5 cents.....	10.2	3.3	13.2	37.7	20.6	3.9	23.7	38.2
67.5 and under 72.5 cents.....	11.9	5.1	17.0	13.2	15.4	8.3	27.5	6.5
72.5 and under 77.5 cents.....	10.3	8.2	13.7	7.9	9.4	15.0	8.9	3.2
77.5 and under 82.5 cents.....	9.6	10.5	11.3	5.5	9.1	16.5	7.9	1.7
82.5 and under 87.5 cents.....	8.3	11.6	8.2	4.1	8.3	16.1	6.1	1.5
87.5 and under 92.5 cents.....	7.0	9.8	6.7	3.5	5.9	13.7	2.7	.4
92.5 and under 100.0 cents.....	7.5	12.3	6.3	3.0	3.8	8.2	2.2	.4
100.0 and under 110.0 cents.....	6.4	10.6	5.9	1.7	3.1	7.9	.9	.1
110.0 and under 120.0 cents.....	4.2	7.5	3.3	1.2	1.4	3.8	.2	
120.0 and under 130.0 cents.....	2.8	5.3	2.1	.6	.9	2.3	.2	
130.0 and under 140.0 cents.....	1.5	3.3	1.0	.2	.2	.4		
140.0 and under 150.0 cents.....	1.0	2.3	.5	.2	.3	.7		
150.0 and under 160.0 cents.....	.7	1.6	.2	(1)	.1	.1		
160.0 and under 170.0 cents.....	.6	1.6	.1	(1)	.1	.1		
170.0 and under 180.0 cents.....	.5	1.1	.1	.1				
180.0 and under 190.0 cents.....	.4	.9	(1)	.1	.1	.1		
190.0 and under 200.0 cents.....	.2	.5	(1)		.1	.2		
200.0 and under 220.0 cents.....	.2	.7	(1)					
220.0 and under 240.0 cents.....	.1	.4	(1)					
240.0 cents and over.....	.2	.6						
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	81,217	27,338	33,074	20,805	5,996	2,045	2,403	1,548

Average hourly earnings	Steel works				Rolling mills			
	All workers	Skill-ed	Semi-skill-ed	Un-skill-ed	All workers	Skill-ed	Semi-skill-ed	Un-skill-ed
Under 30.0 cents.....					(1)		(1)	0.1
30.0 and under 32.5 cents.....					0.1	(1)	0.1	.3
32.5 and under 35.0 cents.....					(1)	(1)	.1	(1)
35.0 and under 37.5 cents.....	0.1			0.4	.2	(1)	.1	.6
37.5 and under 40.0 cents.....	.2	(1)	0.3	.2	.2	0.1	.2	.3
40.0 and under 42.5 cents.....	.4	(1)	(1)	1.3	.2	.1	.2	.3
42.5 and under 47.5 cents.....	.3		.3	.8	.6	.3	.4	1.3
47.5 and under 52.5 cents.....	.3	0.1	.2	.6	1.4	.5	1.3	2.7
52.5 and under 57.5 cents.....	2.6	.3	1.4	6.8	3.2	.7	3.2	6.2
57.5 and under 62.5 cents.....	3.1	.3	2.5	7.4	4.4	1.6	4.6	7.5
62.5 and under 67.5 cents.....	16.4	2.2	14.7	37.9	15.5	3.4	12.1	37.4
67.5 and under 72.5 cents.....	11.2	3.6	10.6	16.4	11.7	5.1	16.1	13.0
72.5 and under 77.5 cents.....	10.1	8.4	14.9	7.6	10.5	7.5	13.9	8.4
77.5 and under 82.5 cents.....	10.1	13.0	11.3	5.1	9.5	9.4	11.6	6.0
82.5 and under 87.5 cents.....	8.8	13.3	7.6	4.0	8.2	10.8	8.4	4.3
87.5 and under 92.5 cents.....	7.0	9.1	5.5	5.5	7.0	9.6	7.2	3.4
92.5 and under 100.0 cents.....	7.4	11.3	5.5	3.8	7.8	13.0	6.8	3.1
100.0 and under 110.0 cents.....	6.4	9.9	7.2	.7	6.7	10.9	6.2	2.1
110.0 and under 120.0 cents.....	5.0	6.7	6.8	1.1	4.3	8.1	3.1	1.4
120.0 and under 130.0 cents.....	3.1	8.2	3.1	.3	2.9	5.6	2.2	.7
130.0 and under 140.0 cents.....	2.1	4.0	1.4	.1	1.6	3.4	1.0	.2
140.0 and under 150.0 cents.....	1.5	3.2	.5		1.0	2.2	.6	.2
150.0 and under 160.0 cents.....	.8	1.9	.1		.7	1.7	.3	.1
160.0 and under 170.0 cents.....	1.3	3.0	.1		.5	1.4	.2	.1
170.0 and under 180.0 cents.....	.6	1.4		(1)	.5	1.2	.1	.1
180.0 and under 190.0 cents.....	.5	1.3	(1)		.4	.9	(1)	.2
190.0 and under 200.0 cents.....	.2	.6			.2	.5	(1)	
200.0 and under 220.0 cents.....	.2	.6			.3	.8	(1)	
220.0 and under 240.0 cents.....	.2	.4			.2	.5	(1)	
240.0 cents and over.....	.1	.2			.2	.7		
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	11,457	4,667	3,368	3,422	63,764	20,626	27,303	15,835

1 Less than a tenth of 1 percent.

workers in this skill group, as semiskilled workers in the former branch had a relatively low average (69.1 cents) while those in the latter branch had a comparatively high average, 79.9 cents. The relative number of unskilled workers did not differ greatly between branches, the highest being 29.9 percent in steel works and the lowest 24.8 in rolling mills.

In all three branches of the industry, average hourly earnings also varied with region. In each branch, earnings were generally highest in the West and lowest in the South. Although somewhat lower than in the West, earnings in the North were still much higher than those in the South. Thus, in the rolling-mills branch, the only one for which it was possible to present averages for all three regions, western workers averaged 94.9 cents an hour, northern workers 84.9 cents, and southern workers 67.9 cents. The same trend is indicated in the steel-mills branch where western workers earned an average of 91.5 cents an hour, which is 4.2 cents more than the average for northern workers and substantially more than that for southern workers.

Much the same general trend obtained for each of the three skill groups. In the rolling-mills branch in the West, skilled workers earned an average of \$1.20 an hour, semiskilled workers 82.8 cents, and unskilled workers 71.3 cents. These earnings exceeded by 33.9, 17.7, and 21.9 cents those of southern workers in the corresponding skill groups. While the average of skilled rolling-mill workers in the North was 20.2 cents below that of similar workers in the West, the earnings of semiskilled and unskilled workers in that region were only slightly lower—2.3 and 0.4 cents, respectively.

VARIATIONS IN EARNINGS BY DEPARTMENTS

It will be remembered that the iron and steel survey was conducted on a departmental basis, information being obtained for a representative number of establishments in 21 departments. Of these, 3 were in the steel-works branch and 17 in the rolling-mills branch. In the blast-furnace branch of the industry there is only the one department.

Of the 21 departments blast furnaces had the lowest average, 73.6 cents, and tin mills the highest, 89.0 cents. (See table 12.) In only four departments, however, was the average under 80 cents and in only one was it under 77 cents. On the other hand, 12 departments averaged between 81 and 85 cents and 5 averaged at least 85 cents. If the highest and lowest averages are overlooked, the spread in average hourly earnings of the remaining 19 departments was only slightly more than 10 cents—from 77.4 cents in puddle mills to 87.7 cents in strip mills.

TABLE 12.—Average Hourly Earnings of Iron and Steel Workers, by Department and Skill, April 1938

Department	Number of workers				Average hourly earnings of—			
	Total	Skilled	Semi-skilled	Unskilled	All workers	Skilled workers	Semi-skilled workers	Unskilled workers
All departments.....	81, 217	27, 337	33, 074	20, 806	\$0. 839	\$0. 902	\$0. 793	\$0. 689
Blast furnaces.....	5, 996	2, 044	2, 403	1, 549	. 736	. 869	. 691	. 602
Steel works.....	11, 457	4, 667	3, 368	3, 422	. 873	1. 022	. 821	. 692
Bessemer converters.....	813	333	207	273	. 847	. 964	. 789	. 728
Open-hearth furnaces.....	9, 784	3, 950	2, 908	2, 926	. 878	1. 030	. 829	. 691
Electric furnaces.....	860	384	253	223	. 845	. 980	. 775	. 663
Rolling mills.....	63, 764	20, 626	27, 303	15, 835	. 844	. 998	. 799	. 698
Puddling mills.....	355	192	99	64	. 774	. 887	. 643	. 606
Blooming mills.....	3, 728	1, 239	1, 632	857	. 861	1. 049	. 785	. 682
Billet mills.....	1, 055	365	497	193	. 839	1. 015	. 767	. 664
Plate mills.....	3, 487	1, 005	1, 395	1, 087	. 820	. 979	. 786	. 692
Rail mills.....	1, 110	329	492	289	. 811	. 968	. 789	. 652
Structural mills.....	1, 169	322	543	304	. 834	. 978	. 816	. 682
Bar mills.....	5, 068	1, 833	1, 658	1, 577	. 789	. 952	. 739	. 636
Rod mills.....	1, 860	652	690	518	. 824	1. 039	. 741	. 657
Wire mills.....	4, 603	2, 432	1, 131	1, 040	. 811	. 903	. 769	. 651
Skelp mills.....	491	171	146	174	. 818	1. 004	. 723	. 699
Lap-weld tube mills.....	1, 994	413	931	650	. 793	. 908	. 800	. 700
Butt-weld tube mills.....	2, 698	575	1, 321	802	. 810	. 973	. 788	. 717
Seamless tube mills.....	2, 726	887	1, 301	538	. 810	. 884	. 817	. 662
Sheet- and tin-bar mills.....	975	340	406	229	. 824	. 967	. 785	. 650
Strip mills.....	11, 107	3, 337	5, 206	2, 564	. 877	1. 044	. 827	. 721
Sheet mills.....	10, 443	2, 627	4, 873	2, 943	. 852	1. 059	. 819	. 707
Tin mills.....	10, 895	3, 907	4, 982	2, 006	. 890	1. 039	. 805	. 776

All three departments in the steel-works branch had high average hourly earnings. Furthermore, these averages varied only 3.3 cents, the lowest average, 84.5 cents, being for electric furnaces and the highest, 87.8 cents, for open-hearth furnaces. The average for Bessemer converters was only 0.2 cent above that for electric furnaces. This similarity in earnings also extended to the skill groups in each of the steel-works departments. Thus the total difference between averages amounted only to 6.6 cents for the skilled, 5.4 cents for the semiskilled, and 6.5 cents for the unskilled workers.

Contributing, no doubt, to the high level of wages in the three steel-mill departments is the high ratio of skilled workers found in them. In all three, over two-fifths of the workers were skilled, the ratios being 40.9 in Bessemer converters, 40.4 in open-hearth furnaces, and 44.7 percent in electric furnaces. The relative number of semi-skilled workers varied from 25.5 percent in Bessemer converters to 29.7 percent in open-hearth furnaces, and that of unskilled workers from 25.9 percent in electric furnaces to 33.6 percent in Bessemer converters.

The wage structure in steel works is very largely determined by the open-hearth department, as not far from seven-eighths of the workers in this branch (85.4 percent) were found in this department. The Bessemer converter and the electric-furnace departments exerted only

a minor influence, as they accounted for only 7.1 and 7.5 percent, respectively, of the total number of workers scheduled in the steel-works branch.

The variation in departmental averages was much greater in rolling mills than in steel works. The averages ranged from 77.4 cents in puddling mills to 89 cents in tin mills. Only three departments, however, averaged less than 80 cents, while 10 averaged between 81 and 84 cents, and four between 85.2 and 89.0 cents.

Although the earnings of skilled workers varied from 88.4 cents in seamless tube mills to as high as \$1.059 in sheet mills, 12 of the 17 departments had a spread of less than 10 cents (95.2 cents to \$1.049) and all but 2 a spread of only 16.2 cents (88.7 cents to \$1.049). Likewise, although the averages ranged for the semiskilled from 64.3 cents in puddle mills to 82.7 cents in strip mills, all but 2 departments had averages between 72.3 and 81.9 cents. Finally, despite the range in the averages for the unskilled (from 60.6 cents in puddle mills to 77.6 cents in tin mills), 11 departments had averages between 65 and 70 cents and 4 between 65 and 72.1 cents.

The variations in the average hourly earnings of the 17 departments in the rolling-mills branch were, to a considerable extent, caused by wide differences in the skill composition of the labor force. Thus, the relative number of skilled workers ranged all the way from 20.7 percent in lap-weld tube mills and 21.3 percent in butt-weld tube mills to 52.8 percent in wire mills and 54.1 percent in puddling mills. The latter two ratios, however, are extreme, being due to the very great weight carried by two skilled occupations (puddlers in puddling mills and wire drawers in wire mills). Omitting the above four departments, the ratio of skilled workers in the other 13 departments ranged from about one-fourth to somewhat over one-third of the labor force. Of the three skill groups, the semiskilled is, on the whole, the most important, as in 12 of the 17 departments semiskilled workers represented between two-fifths and one-half of the labor force. In only 4 departments were less than one-third of the workers semiskilled. The unskilled group was generally the smallest of the three. In only one department, skelp mills, were more than one-third (35.5 percent) of the workers unskilled. For the remaining departments the relative number of unskilled workers ranged from over one-fourth to approximately one-third in 8, and from one-fourth down to less than one-fifth in 8 departments.

The influence of individual departments on the level of wages in rolling mills and also on the general wage structure of the industry varies greatly, due to very irregular distribution of workers among departments. Thus, puddling mills, which had the lowest average hourly earnings of the 17 departments in rolling mills, accounted for

only 0.6 percent of the workers in this branch of the industry. On the other hand, three of the four departments having the highest average hourly earnings (in excess of 85 cents) accounted for over one-half (50.9 percent) of all the workers in rolling mills.¹⁰



SALARIES OF LIBRARY EMPLOYEES, 1939

Public Libraries

IN SELECTED cities of the United States having populations of over 200,000, the salaries of chief librarians in public libraries on November 1, 1939, ranged from \$3,000 in Dallas, Tex., to \$10,000 in Brooklyn, N. Y., and Newark, N. J., according to information published in the American Library Association Bulletin (Chicago) for April 1940. However, salaries of chief librarians in several cities, notably New York, were not reported. Salaries of department heads ranged from a minimum of \$1,020 (maximum, \$2,700) in Birmingham, Ala., to a maximum of \$4,500 in Milwaukee, Wis. The minimum for catalogers ranged from \$900 (maximum, \$960) in New Orleans, La., to a maximum of \$2,880 in Chicago.

Table 1 shows salaries of librarians, department heads, and catalogers on November 1, 1939, in libraries of cities of over 200,000 population in the United States and Canada.

TABLE 1.—Salaries for Specified Occupations in Public Libraries in Cities of Over 200,000 Population, in Effect Nov. 1, 1939

City	Chief librarian	Department heads			Branch and sub-branch librarians			Catalogers ¹		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
United States and Canada:										
High.....	\$10,000	19	\$3,300	\$4,500	53	\$2,520	\$3,420	17	\$1,980	\$2,880
Median.....	6,000	8	2,100	2,820	12	1,560	2,050	4½	1,380	1,800
Low.....	2,988	3	1,020	1,500	1	600	1,320	1	900	960
United States										
Akron, Ohio.....	5,000	6	2,580	2,640	9	1,600	2,000	1	1,600	.....
Atlanta, Ga. ³	3,600	4	2,100	2,100	9	1,200	1,680	5	1,200	1,440
Baltimore, Md.....	7,000	18	2,400	3,200	25	1,440	1,920	7	1,320	1,740
Birmingham, Ala. ³	4,000	12	1,020	2,700	11	900	1,800	.....	.....	.....
Buffalo, N. Y.....	7,300	10	2,800	3,100	17	1,660	2,300	.....	.....	.....
Chicago.....	(4)	14	2,400	3,480	46	1,560	3,420	17	1,440	2,880
Cincinnati, Ohio ¹	(4)	13	2,000	3,200	11	1,300	1,880	10	1,480	1,860
Cleveland, Ohio ¹	9,000	11	2,900	4,400	33	2,200	3,400	12	1,560	2,800
Columbus, Ohio ⁶	5,000	4	1,980	2,820	6	1,740	1,980	3	1,140	1,620
Dallas, Tex.....	3,000	5	1,500	1,800	5	900	1,380	1	1,200	.....
Dayton, Ohio ⁶	6,000	9	2,040	3,120	10½	1,170	2,400	4	1,980	2,280
Denver, Colo.....	6,000	12	1,800	2,500	12	1,200	1,560	5	1,200	1,560
Detroit, Mich.....	8,500	15	2,700	4,140	21	2,520	2,760	.....	.....	.....
Houston, Tex.....	1,020	4	1,530	2,100	3	1,080	1,500	1	1,320	.....

See footnotes at end of table.

¹⁰ Of the workers in rolling mills, 17.4 percent were found in strip mills, 17.1 percent in tin mills, and 16.4 percent in sheet mills.

TABLE 1.—Salaries for Specified Occupations in Public Libraries in Cities of Over 200,000 Population, in Effect Nov. 1, 1939—Continued

City	Chief librarian	Department heads			Branch and sub-branch librarians			Catalogers ¹		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
United States—Continued										
Indianapolis, Ind.	\$6,500	11	\$1,932	\$3,000	19	\$1,560	\$2,916	6	\$1,020	\$1,584
Jersey City, N. J.	7,500	5	2,580	2,760	12	1,800	2,040	7	1,800	2,040
Kansas City, Mo.	5,425	9	1,627	2,520	15	1,522	2,100	3	1,276	1,575
Los Angeles, Calif. (city)	6,000	19	2,400	3,300	41½	1,980	2,700	13	1,500	1,920
Los Angeles, Calif. (county) ⁷	5,000				89½	900	1,740	6	1,380	1,860
Louisville, Ky. ³	6,000	7	1,980	2,220	9	1,380	1,800	(⁹)		
Memphis, Tenn. ⁵	5,400	7	1,920	1,380	25	600	2,040	3	1,200	1,440
Milwaukee, Wis. ⁶	7,000	9	2,520	4,500	18	1,860	2,220	5	1,920	2,160
Minneapolis, Minn. ⁷	6,000	12	2,400	3,000	* 25	1,800	2,500	2	1,400	1,800
New Orleans, La.	4,000	4	1,320	1,500	6	900	1,320	3	900	960
New York City		24	2,100	3,600	111	1,620	2,820	35	1,320	2,220
N. Y. P. L. circulation department ¹⁰	(¹¹)	8	2,400	3,600	53	2,160	2,820	12	1,380	2,220
Brooklyn	10,000	7	2,100	3,600	34	2,100	2,820	12	1,440	2,220
Queens	7,500	9	2,640	3,600	24	1,620	2,820	11	1,320	2,160
Newark, N. J.	10,000	9	1,400	3,300	8	1,600	3,100	3	1,700	2,200
Oakland, Calif.	6,000	5	2,100	2,400	19	1,560	1,800	1	1,680	
Omaha, Nebr.	3,040	7	1,500	2,200	3	1,380	1,740	2	1,200	1,260
Philadelphia, Pa.	(⁹)	12	1,800	2,475	32	1,350	1,700	3	1,200	1,840
Pittsburgh, Pa.		12	1,650	4,000	13	1,680	2,100	7	1,320	1,800
Old City	8,000	8	3,000	4,000	12	1,680	2,100	6	1,320	1,800
Allegheny	4,130	4	1,650	2,200	1	1,980		1	1,620	
Portland, Oreg. ¹	4,800	7	2,180	2,640	17	1,320	1,980	6	1,440	1,740
Providence, R. I.		8	(⁹)	(⁹)	21	(⁹)	(⁹)	9	(⁹)	(⁹)
Providence, P. L.	(⁹)	7	(⁹)	(⁹)	20	(⁹)	(⁹)	8	(⁹)	(⁹)
Elmwood, P. L.	(⁹)	1	(⁹)		1	(⁹)		1	(⁹)	
Rochester, N. Y.	6,000	¹² 12	1,680	3,360	¹³ 12	1,680	2,300	3	1,320	1,800
St. Louis, Mo.	9,000	16	1,710	3,600	16	1,410	2,190	12	1,440	2,160
St. Paul, Minn.	4,500				4	1,919	2,059	4	1,778	1,778
San Antonio, Tex.	3,120	3	1,740	1,824	3	906	1,380			•
San Francisco, Calif.	4,800	11	2,100	3,000	21	1,560	2,100	6	1,200	1,920
Seattle, Wash.	6,000	10	2,200	2,820	10	1,740	2,220	2	1,680	1,800
Syracuse, N. Y.	5,000	11	1,500	2,200	7	1,500	1,800	1	1,300	
Toledo, Ohio	4,500	7	2,100	2,700	14	1,200	2,200	5	1,160	1,500
Washington, D. C.	8,000	4	3,300	3,500	12	1,800	3,400	3	1,620	2,100
Youngstown, Ohio ²	(⁹)	4	2,100	2,700	13	1,320	1,800	1	1,500	
Canada										
Vancouver, B. C.	4,162	5½	1,776	2,220	1	1,776		2	1,554	1,720
Winnipeg, Manitoba	2,988	3	1,371	1,687	3	1,160	1,371			

¹ Excludes department head.² Serves city and county.³ Serves city and part of county.⁴ Salary confidential or not for publication.⁵ Excludes statistics for county department.⁶ Provides extension service to all residents of county not served by a local library.⁷ Serves part of county.⁸ Not reported.⁹ Includes 9 librarians in junior high school branches on 10 months' basis; salaries omitted.¹⁰ Serves 3 boroughs—Bronx, Manhattan, and Richmond.¹¹ Chief of circulation department; salary not for publication.¹² Includes 2 active department heads at \$1,680 each; other department heads' salaries begin at \$1,860.¹³ Includes 3 acting branch librarians at \$1,680 each; other branch librarians' salaries begin at \$1,860.

A summary of salary data for five classes of public-library employees, taken from the American Library Association Bulletin for April 1940, is given in table 2 for each of four population groups.¹

¹ For comparative statistics for 1938, see June 1939 Monthly Labor Review (p. 1411).

TABLE 2.—Summary of Public-Library Salary Statistics for 5 Classes of Employees as of Nov. 1, 1939

Libraries serving population of—	Chief librarian	Assistant chief librarian	Department heads		Branch and subbranch librarians		Professional assistants ¹	
			Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
More than 200,000:								
High.....	\$10,000	\$5,720	\$3,300	\$4,500	\$2,520	\$3,420	\$2,580	\$3,500
Median.....	6,000	3,150	2,100	2,820	1,500	2,059	1,260	1,900
Low.....	2,988	1,560	1,020	1,500	600	1,320	798	1,055
100,000 to 199,999:								
High.....	6,000	3,000	2,400	3,000	2,040	2,220	1,692	2,200
Median.....	3,820	2,361	1,596	2,100	1,328	1,680	1,080	1,500
Low.....	2,700	1,950	900	1,200	600	900	600	984
35,000 to 99,999:								
High.....	4,860	3,200	2,500	3,040	2,410	2,800	1,650	2,300
Median.....	3,000	2,180	1,620	1,980	1,500	1,560	1,269	1,508
Low.....	2,080	1,200	960	960	600	780	720	1,020
10,000 to 34,999:								
High.....	4,000	2,100	2,200	1,960	2,160	-----	1,440	1,600
Median.....	2,100	1,460	1,370	1,575	1,340	-----	1,050	1,260
Low.....	960	800	720	1,080	660	-----	720	720

¹ Exclusive of department heads; first assistants in departments, divisions, and branches; catalogers; and children's librarians.

College and School Libraries

The larger colleges and universities were paying chief librarians from \$1,800 to \$8,750 on May 1, 1939, except in two instances of \$10,000 salaries, under which additional duties were included. Salaries of department heads ranged from \$1,100 to \$4,000, and of professional workers in the order and catalog departments, respectively, from \$720 to \$2,500 and \$720 to \$3,250. In libraries of small colleges, librarians received from \$1,190 to \$5,312, and professional assistants from \$600 to \$3,912.

TABLE 3.—Salaries in University, College, and School Libraries, as of May 1, 1939

Library and salary classification	Number of employees (full-time equivalent)		Salaries of—				
			Librarians	Professional assistants ¹		Subprofessional assistants	
	Total	Professional			Minimum	Maximum	Minimum	Maximum
College and university:							
High.....	150½	91	\$10,000	\$5,500	\$4,000	\$1,500	\$1,680
Median.....	34 ⁶⁵ / ₁₀₀	20 ¹³ / ₁₆	4,500			943	1,309
Low.....	4	4	1,800	600	700	540	900
Small college:							
High.....	15	11	5,312	3,000	3,912	1,320	1,350
Median.....	4	3	2,332½			800	1,025
Low.....	1	1	1,190	600	1,200	520	728
Teachers college and normal school:							
High.....	10	9	3,750	2,280	2,400	1,200	
Median.....	3	2½	2,200			1,050	
Low.....	1	1	1,400	900	1,440	700	
Junior and senior high school:							
High.....			² 4,600	2,316	3,600	³ 1,680	³ 1,536
Median.....			³ 2,486	1,550	2,150	³ 960	³ 1,265
Low.....			² 1,307	945	1,600	³ 731	³ 829

¹ Includes associate or assistant chief librarians, department heads, and professional assistants; where only one salary is shown for any one of these classifications it is included in the minimum column.

² Maximum paid high-school libraries in various cities.

³ Includes clerical assistants.

TABLE 4.—Salaries in the Larger University and College Libraries in Effect May 1, 1939

Library	Chief librarian	Department heads			Order department—professional workers			Catalog department—professional workers		
		Number	Minimum	Maximum	Number	Minimum	Maximum	Number	Minimum	Maximum
All libraries:										
High	¹ \$10,000	11	\$3,000	\$4,000	17½	\$2,100	\$2,500	27½	\$2,028	\$3,250
Median	4,500	4	1,750	2,400	2	1,266	1,831	5	1,380	1,910
Low	1,800	2	1,100	1,560	1	720	1,200	1	720	1,500
Arizona	² 3,990	2	1,500	2,025	1	1,500	-----	1	1,313	-----
Baylor	3,600	-----	-----	-----	-----	-----	-----	1	1,500	-----
California (Berkeley)	5,700	4	2,500	3,000	7½	1,500	2,300	12½	1,620	2,500
California (Los Angeles)	(³)	4	2,700	3,000	7	1,620	1,860	9	1,500	2,500
Chicago	8,750	4	1,500	2,538	49½	1,440	1,836	16½	1,200	2,160
Cincinnati	4,632	2	2,079	2,356	2	1,137	1,326	6	1,035	1,705
Colgate	3,800	3	1,900	2,000	-----	-----	-----	-----	-----	-----
Colorado State	3,600	-----	-----	-----	-----	-----	-----	-----	-----	-----
Columbia	(³)	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dartmouth	6,300	6	1,320	2,250	1	1,080	-----	6½	1,440	1,800
Denver	(⁴)	5	1,200	1,560	-----	-----	-----	1	720	-----
Duke	(³)	7	(³)	(³)	5	(³)	(³)	11	(³)	(³)
Harvard	(⁵)	3	(³)	(³)	5	1,200	2,460	27½	1,200	2,460
Illinois	⁶ 7,000	6	2,800	3,400	17½	1,400	2,400	24	1,400	2,700
Iowa	-----	8	⁶ 1,500	⁸ 2,600	6	1,020	1,380	8½	1,402	2,000
Iowa State	5,175	4	1,620	2,200	2	1,200	1,380	6	1,380	1,920
Joint university libraries ⁷	6,000	4	1,320	1,800	-----	-----	-----	5	900	1,740
Kansas	3,800	10	1,100	2,175	1	1,100	-----	1	1,100	-----
Louisiana	⁸ 6,000	11	1,900	2,800	2	1,200	1,200	6	1,320	2,200
Michigan	⁸ 10,000	9	2,500	3,000	10	1,200	2,300	16	1,380	2,400
Michigan State	⁹ 4,500	5	1,650	2,400	1½	1,750	-----	2	1,600	1,900
Missouri	4,000	4	1,800	2,400	5	1,000	1,500	4	1,400	1,800
Nebraska	(³)	4	(³)	(³)	1	(³)	-----	5	(³)	(³)
New York	(¹⁰)	5	1,600	3,000	2	1,800	2,000	6	1,600	2,100
North Carolina	(³)	8	1,611	2,076	2	1,496	1,496	3	1,402	1,683
North Dakota	2,050	2	1,500	1,560	-----	-----	-----	-----	-----	-----
Oberlin	⁹ 7,500	2	2,600	2,700	1	2,100	-----	3	1,620	2,100
Oklahoma	⁹ 3,804	4	1,200	2,508	1	720	-----	3	1,392	1,800
Oregon	¹¹ 4,122	6½	1,209	2,854	2½	832	1,500	3	1,200	1,800
Oregon State	¹² 4,683	3½	¹² 2,150	¹³ 2,700	3½	¹³ 1,332	¹³ 1,500	3½	1,300	1,800
Pennsylvania	5,000	6	1,800	3,000	1	1,440	-----	9	1,440	2,160
Pennsylvania State	4,600	4	1,700	2,100	1	1,200	-----	5	1,200	1,700
Pittsburgh	(³)	5	1,500	2,106	-----	-----	-----	2	1,200	1,500
Princeton	(¹⁴)	5	3,000	4,000	4	1,500	2,500	10	1,200	2,300
Rochester	(³)	5	1,800	2,800	-----	-----	-----	4	2,000	2,100
Smith	(³)	-----	-----	-----	2	(³)	(³)	6	(³)	(³)
South Dakota State	2,292	-----	-----	-----	-----	-----	-----	2	1,320	1,500
Syracuse	¹⁵ 5,700	3	1,920	1,920	4	1,200	1,680	4	1,200	1,800
Texas	5,500	10	1,300	2,400	2	1,200	1,200	5	1,200	1,800
Washington (St. Louis)	(¹⁶)	4	(³)	(³)	-----	-----	-----	2	(³)	(³)
Washington (Seattle)	4,740	4	2,160	2,400	4	1,380	1,860	6	1,380	1,860
Wayne	4,080	4	3,000	3,000	-----	-----	-----	-----	-----	-----
Wyoming	2,976	3	1,800	2,172	-----	-----	-----	1	2,028	-----
Yale	(³)	5	(³)	(²)	9	1,400	2,500	25½	1,100	3,250

¹ Includes additional duties.² Plus 1 librarian emeritus at \$1,700.³ Salary confidential or not for publication.⁴ 1 director of libraries ¼ time; 1 acting librarian ½ time.⁵ Serves also as director of library school.⁶ Plus \$210 for summer session.⁷ Includes libraries in George Peabody College for Teachers, Scarritt College for Christian Workers, and Vanderbilt University.⁸ Includes payment for some teaching.⁹ Plus \$67 for summer session; plus 1 librarian emeritus at \$1,200.¹⁰ Director of libraries at \$10,000, also 7 librarians of individual libraries at \$1,800 to \$6,000.¹¹ Plus director of libraries, Oregon State System of Higher Education, who is paid ½ of salary by University of Oregon.¹² Receives ¼ of salary as director of libraries, Oregon State System of Higher Education.¹³ Head of order department and 1 professional assistant in order department have ½ of salary paid by University of Oregon and ½ by Oregon State College.¹⁴ Acting librarian; salary confidential or not for publication.¹⁵ Plus \$500 for summer session; serves also as director of library school.¹⁶ Serves also as professor of legal bibliography; salary confidential.

The salaries of librarians and certain assistants in college and school libraries on May 1, 1939, are shown in table 3, by type of organization.

Table 4 gives salary data for four classes of employees in the larger university and college libraries as of May 1, 1939, by individual library. The figures in this table and in table 3 are from the American Library Association Bulletin for February 1940.



WAGES AND HOURS IN THE PUERTO RICAN COFFEE INDUSTRY ¹

COFFEE production, which was the leading industry of Puerto Rico up to the beginning of the twentieth century, formerly employed more than 150,000 persons, while annual exports averaged about 500,000,000 pounds. After the Island was ceded to the United States, coffee production had two serious setbacks, one resulting from the loss of the Spanish market and the other from the hurricane of 1899. The situation improved somewhat up to 1915, but from that time the industry began to decline and the sugar industry rapidly grew in importance. Hurricanes in 1928 and 1932 had a further adverse effect on the coffee industry.

The coffee plant grows on the steep slopes of the mountainous region in the western part of the Island, where no other crop of commercial value can be raised, and as the coffee harvest begins after the sugar-cane harvest is over, many workers left unemployed in the sugar-cane fields find employment on the coffee farms. Efforts have been made by the government to restore the industry, by imposing a high import tax on foreign coffees and by giving all possible aid and facilities to coffee growers. The Puerto Rico Reconstruction Administration has established thousands of workers on the coffee "fincas" of the interior, for whom a system of subsistence homesteading has been developed on arable land sold by the coffee growers to the PRRA at one-half its appraised value. In addition to these measures the Insular Government has assumed the responsibility of disposing of the excess coffee crop abroad. The Puerto Rico Coffee Producers Cooperative, formed in 1928, also has been successful in its efforts to rehabilitate the industry. In 1938 this cooperative had a membership of 456 farmers, and during that year it handled nearly 50 million pounds of raw coffee. The cooperative exports ready-roasted coffee to the United States, and has a normal daily roasting capacity of 15,000 pounds, and a normal canning capacity of 5,000 cans.

Working and living conditions on the coffee plantations are poor, and wages are very low. A study of 16 coffee farms employing 184

¹ Puerto Rico. Department of Labor. Puerto Rico Labor News, San Juan, January-April, 1940.

workers, made by the Puerto Rico Department of Labor in the fiscal year ending June 30, 1939, showed that 95 percent of these workers received hourly wages ranging from 5 to 10 cents. They worked an average of 4.4 days a week and actual weekly earnings averaged \$2.21. The survey also covered 9 crushing mills, employing 286 persons. These mill workers averaged only 16½ hours per week, and the weekly wage averaged \$1.75. Earnings were higher in coffee-roasting establishments, as in 11 plants with 158 employees, the average weekly hours were 43.4 and the average actual weekly earnings were \$7.40.

The following table shows the average hourly earnings on 16 coffee farms, in 9 coffee-crushing mills, and in 11 coffee-roasting establishments, by occupation, in 1938-39.

Average Hours and Earnings in Coffee Farms, Coffee-Crushing Mills, and Coffee-Roasting Establishments in Puerto Rico, by Occupation, 1938-39

Occupation	Number of workers surveyed	Average hours per week		Average actual earnings	
		Actually worked	Percent of full time	Per hour	Per week
Coffee farms	184	31.5	65.2	\$0.070	\$2.21
Laborers.....	55	29.3	65.2	.061	1.78
Foremen.....	15	50.6	100.0	.087	4.41
Loppers.....	11	23.3	48.5	.062	1.45
Mowers.....	4	32.0	66.6	.062	2.00
Overseers.....	5	51.2	100.0	.128	6.55
Pickers.....	10	48.0	100.0	.062	3.00
Pruners.....	22	33.3	69.4	.061	2.04
Sowers.....	5	29.0	60.4	.064	1.58
Tree polers.....	7	25.1	52.2	.091	2.28
Water carriers.....	1	48.0	100.0	.062	3.00
Weeders.....	49	24.5	51.1	.070	1.72
Coffee-crushing mills	286	16.5	34.4	.106	1.75
Bag sewers and fillers.....	4	32.0	66.6	.125	4.00
Laborers.....	20	45.6	95.0	.099	4.53
Foremen.....	1	48.0	100.0	.096	4.61
Loaders.....	11	22.9	47.7	.148	3.38
Machine operators.....	8	44.0	91.6	.204	9.00
Managers.....	2	48.0	100.0	.344	16.50
Revisers.....	13	14.7	30.7	.119	1.75
Selectors.....	217	10.7	22.2	.070	.75
Stockers.....	9	41.8	87.0	.142	5.95
Storekeepers.....	1	48.0	100.0	.146	7.00
Coffee-roasting plants	158	43.4	90.3	.17	7.40
Chauffeurs.....	11	48.0	100.0	.248	11.91
Clerks.....	4	48.0	100.0	.172	8.25
Laborers.....	24	44.3	92.3	.107	4.77
Distributors.....	8	48.0	100.0	.088	4.25
Grinders and hullers.....	6	29.0	60.4	.079	2.29
Managers.....	3	48.0	100.0	.383	18.38
Mechanics.....	3	48.0	100.0	.257	12.33
Night watchmen.....	2	59.5	100.0	.117	7.00
Packers and weighers.....	55	38.2	79.6	.108	4.14
Sa'esmen.....	34	48.0	100.0	.272	13.06

ANNUAL SALARIES AND WAGES IN CANADIAN MANUFACTURING, 1937

IN 1937, in 10 of 40 leading industries in Canada, the average annual earnings of salaried employees were over \$2,000; in 7 industries the range was from \$1,800 to \$2,000; in 14 from \$1,500 to \$1,800; and in the remaining 9 industries salaries were under \$1,500, as shown in table 1.¹ The lowest salaries were in the sawmilling, butter and cheese, and bread and other products industries, which include a large percentage of small undertakings.

TABLE 1.—Average Salaries and Wages in 40 Leading Industries in Canada, 1937

[Industries ranked according to aggregate salaries and wages paid]

Industry	Number of salaried employees		Salaries		Number of wage earners		Wages	
	Male	Female	Total	Average	Male	Female	Total	Average
Totals, 40 leading industries	66, 199	17, 259	\$138, 200, 018	\$1, 656	333, 152	90, 473	\$416, 738, 225	\$984
Pulp and paper	3, 475	569	9, 561, 449	2, 364	28, 626	535	39, 196, 346	1, 344
Railway rolling stock	1, 357	81	3, 104, 117	2, 159	20, 027	31	26, 083, 040	1, 300
Sawmills	3, 394	223	3, 416, 279	945	30, 129	171	23, 757, 593	784
Electrical apparatus	4, 038	1, 449	10, 139, 101	1, 881	12, 260	3, 959	16, 152, 335	996
Printing and publishing	6, 274	2, 000	12, 397, 079	1, 498	8, 314	1, 246	12, 792, 297	1, 338
Automobiles	1, 650	519	4, 626, 793	2, 133	12, 442	335	17, 512, 198	1, 371
Primary iron and steel	870	214	2, 643, 902	2, 439	12, 927	43	17, 282, 596	1, 333
Bread, bakery products	2, 484	671	3, 208, 837	1, 017	15, 711	2, 386	16, 550, 903	915
Nonferrous metal smelting	862	141	2, 575, 849	2, 568	10, 567	—	15, 415, 098	1, 459
Slaughtering and meat packing	2, 629	366	5, 344, 875	1, 785	8, 998	1, 077	11, 740, 133	1, 165
Clothing, women's factory	2, 043	984	4, 816, 453	1, 591	4, 698	12, 256	12, 110, 018	714
Cotton yarn and cloth	495	171	1, 383, 263	2, 077	11, 958	6, 536	14, 967, 093	809
Hosiery, knitted goods	1, 172	667	3, 265, 066	1, 775	6, 984	11, 427	12, 963, 807	704
Machinery	2, 006	588	4, 611, 155	1, 778	9, 760	284	11, 448, 237	1, 140
Butter and cheese	4, 893	893	5, 296, 892	915	10, 274	523	10, 402, 193	963
Printing and bookbinding	2, 966	755	6, 013, 297	1, 616	7, 121	2, 516	9, 576, 543	994
Castings and forgings	1, 196	312	2, 768, 908	1, 836	10, 524	132	11, 565, 015	1, 085
Rubber goods, including footwear	1, 459	479	3, 449, 685	1, 780	8, 039	3, 058	10, 591, 381	954
Boots and shoes, leather	1, 398	397	2, 842, 222	1, 667	9, 209	5, 859	10, 184, 420	676
Clothing, men's factory	1, 592	467	2, 994, 446	1, 454	5, 301	4, 816	9, 140, 997	904
Biscuits, confectionery, cocoa, etc.	2, 299	575	4, 609, 104	1, 604	4, 028	4, 977	6, 282, 900	698
Automobile supplies	763	263	1, 913, 557	1, 865	6, 622	768	8, 444, 541	1, 143
Sheet-metal products	1, 235	348	2, 688, 202	1, 698	6, 072	844	6, 830, 123	988
Furniture	1, 289	297	2, 260, 928	1, 426	8, 859	359	7, 221, 018	783
Silk and artificial silk	678	344	2, 016, 630	1, 973	5, 579	3, 645	7, 082, 807	768
Petroleum products	810	129	2, 156, 901	2, 297	4, 189	9	6, 089, 942	1, 451
Breweries	1, 240	141	3, 224, 327	2, 335	3, 732	38	4, 690, 190	1, 241
Tobacco, cigars, etc.	1, 666	396	3, 596, 195	1, 744	2, 045	3, 813	3, 981, 915	680
Planing mills	1, 287	207	1, 953, 933	1, 308	6, 849	26	5, 426, 703	789
Agricultural implements	701	216	1, 538, 918	1, 678	5, 466	63	5, 811, 125	1, 051
Hardware and tools	620	254	1, 694, 012	1, 938	4, 838	799	5, 545, 611	984
Fruit and vegetable preparation	969	318	1, 811, 904	1, 408	4, 493	4, 850	5, 382, 573	576
Furnishing goods, men's	864	422	2, 242, 845	1, 744	1, 383	7, 404	4, 930, 469	561
Boxes and bags, paper	823	268	2, 383, 772	2, 185	3, 062	2, 484	4, 384, 199	791
Brass and copper	821	198	1, 896, 008	1, 861	3, 781	294	4, 414, 376	1, 083
Flour and feed mills	1, 632	201	2, 295, 245	1, 252	3, 817	153	3, 582, 511	902
Heating and cooking apparatus	651	190	1, 462, 501	1, 739	4, 357	41	4, 398, 122	1, 000
Coke and gas products	836	253	1, 690, 746	1, 553	2, 936	2	4, 018, 823	1, 368
Woolen cloth	377	131	1, 064, 367	2, 095	3, 589	2, 401	4, 505, 858	752
Wire and wire goods	475	162	1, 240, 315	1, 947	3, 586	313	4, 291, 576	1, 101

The highest annual wages (those exceeding \$1,350) were reported for four industries—nonferrous metal smelting and refining, \$1,459;

¹ Canada. Dominion Bureau of Statistics. The Manufacturing Industries in Canada, summary report. Ottawa, 1940.

petroleum products, \$1,451; automobiles, \$1,371; and coke and gas products, \$1,368. In 13 industries the annual earnings were less than \$800, this group including various seasonal industries. Other industries for which low average wages were reported were textiles, tobacco, and boots and shoes, in which female wage earners constitute a large proportion of the labor force, in some instances more than 50 percent.

Average annual salaries and wages have both increased substantially since 1933, the former being only \$1,608 in that year and \$1,692 in 1937, while wages in the same period rose from \$777 to \$965, as reported in table 2.²

TABLE 2.—Salaries and Wages in All Manufacturing Industries in Canada, 1931 to 1937

Year	Number of salaried employees		Salaries		Number of wage earners		Wages	
	Male	Female	Total	Average	Male	Female	Total	Average
1937	91,092	24,735	\$195,983,475	\$1,692	427,285	117,339	\$525,743,562	\$965
1936	81,409	23,008	173,198,057	1,659	379,977	109,965	438,873,377	896
1935	76,213	21,717	160,455,080	1,638	353,790	104,944	399,012,697	870
1934	71,963	20,132	148,760,126	1,615	326,598	101,119	355,090,929	830
1933	67,875	18,761	139,317,946	1,608	287,266	94,756	296,929,878	777
1932	68,264	18,786	151,355,790	1,739	288,817	92,966	322,245,926	844
1931	71,198	20,293	172,289,095	1,883	337,636	99,513	415,277,895	950

When the index number of average annual wages, with 1917 as a base, is divided by the cost-of-living index number on the same base, real average earnings in 1937 show an advance of 9.5 percent over 1931, according to table 3.

TABLE 3.—Real Wages in Manufacturing Industries in Canada, 1931 to 1937

Year	Wages paid	Average number of wage earners	Average yearly earnings	Index numbers (1917=100)		
				Average yearly earnings	Cost of living	Real value of average yearly earnings
1937	\$525,743,562	544,624	\$965	126.6	97.1	130.4
1936	438,873,377	489,942	896	117.6	94.4	124.6
1935	399,012,697	458,734	870	114.2	92.4	123.6
1934	355,090,929	427,717	830	108.9	91.8	118.6
1933	296,929,878	382,022	777	102.0	90.5	112.7
1932	322,245,926	381,783	844	110.8	95.0	116.6
1931	415,277,895	437,149	950	124.7	104.7	119.1

SALARIES IN CANADIAN FIRE DEPARTMENTS, JANUARY 1940

SALARIES of fire chiefs in 57 cities and towns of Canada at the beginning of 1940, ranged from \$1,560 in Prince Rupert (British Colum-

² Since the preparation of this article the following figures for Canadian manufactures in 1938 have been received: Average annual salary, \$1,719; average annual wage, \$956. (Canadian Labor Gazette, Ottawa, June 1940, p. 572.)

bia) with a population of 6,380, to \$6,420 in Toronto with a population of 649,000. The salary schedules for assistant fire chiefs in 42 cities and towns ranged from \$1,300 in Pembroke (Ontario) to \$5,350 in Toronto. The maximum pay of privates (firemen) was as low as \$1,080 in Burnaby (British Columbia) to \$2,087 in Toronto. Salary data for various other occupations connected with the fire departments in Dominion cities are given in the following table.¹

Salaries in Fire Departments in Canada, January 1940

City and Province	Popula- tion	Num- ber of men	Chief	Deputy or as- sistant chief	District or bat- talion chief	Cap- tains	Lieu- tenants	Fire alarm opera- tors
Montreal, Que.	1,286,388	950	\$6,000	\$3,500	\$3,000	\$2,260	\$2,080	\$1,800
Toronto, Ont.	649,000	662	6,420	5,350	3,264	2,515	2,247	2,087
Vancouver, B. C.	300,000	369	5,415	3,249	2,479	2,098		
Winnipeg, Man.	223,735	315	4,218	2,847	2,531	2,088	1,896	1,687
Hamilton, Ont.	155,276	187	4,000	2,800	2,200	2,100	2,000	1,200
Quebec, Que.	150,000	182	3,500	2,800	2,000	1,539	1,443	1,600
Ottawa, Ont.	147,378	184	4,017	2,472	2,369	2,060	1,957	1,751
Windsor, Ont.	104,007	98	3,600	2,800	2,250	2,000		1,800
Edmonton, Alta.	90,419	109	2,448	1,956		1,846		1,397
Calgary, Alta.	87,000	102	3,540	2,460		1,986	1,746	1,401
London, Ont.	77,000	88	3,000	2,374	2,058	1,800	1,765	
York Township, Ont.	75,842	35	2,800	2,500	2,000		1,550	
Regina, Sask.	55,000	74	2,700	2,400		1,842		1,542
St. John, N. B.	47,000	56	2,000	1,840	1,740	1,530		1,500
Trois River, Que.	45,000	60	2,340	1,820		1,612		
Saskatoon, Sask.	41,600	57	2,388	1,799		1,624		
Victoria, B. C.	39,082	77	3,066	2,220		1,926	1,836	1,476
East York, Ont.	38,132	10	1,976			1,612		
Kitchener, Ont.	33,450	32	2,800	1,860		1,600	1,560	
Sherbrooke, Que.	33,362	81	3,600			1,456	1,404	936
Sudbury, Ont.	33,000	20	2,400	1,800		1,680	1,620	
Hull, Que.	31,667	38	2,000	1,550		1,350	1,250	
Brantford, Ont.	31,497	28	2,200			1,825	1,733	
Burnaby, B. C.	28,000	12			1,440	1,200		
St. Catharines, Ont.	27,756	32	2,100	1,800		1,600		
Westmount, Que.	26,500	82	3,500	2,500			1,980	
Timmins, Ont.	26,345	21	3,000	2,400		2,220	1,920	
Kingston, Ont.	25,792	25	2,300	1,555		1,460	1,314	1,205
Fort William, Ont.	25,300	40	2,700	1,980		1,750		
Sydney, N. S.	25,000	53	1,900					
Oshawa, Ont.	25,000	21	2,327			1,750	1,700	
Sault Ste. Marie, Ont.	24,358	26	2,000	1,530		1,480	1,430	
Peterborough, Ont.	24,176	22	2,500	1,675		1,560	1,475	
Scarborough, Ont.	23,208	7	1,575					
New Westminster, B. C.	22,000	39	2,640	2,100		1,980	1,817	
Guelph, Ont.	21,818	21	2,400			1,650	1,500	
Port Arthur, Ont.	21,751	29	2,490	2,010		1,800		
Niagara Falls, Ont.	19,000	14	1,860			1,650	1,585	1,800
Sarnia, Ont.	18,000	22	2,160	1,770		1,650	1,590	
Stratford, Ont.	17,200	19	2,400	1,900		1,650		
St. Thomas, Ont.	17,000	17	2,500	1,800		1,600	1,550	
Chatham, Ont.	17,000	18	1,800			1,600	1,550	
Brandon, Man.	16,417	22	2,000			1,550	1,400	
North Bay, Ont.	15,506	12	2,080	1,544		1,455		
Belleville, Ont.	14,678	20	1,800	1,500		1,296	1,260	
Galt, Ont.	14,410	16	1,900			1,350		
Lethbridge, Alta.	14,000	21	2,042			1,740		
Owen Sound, Ont.	13,400	13	1,800	1,400		1,300		
Forest Hill, Ont.	11,757	16	3,600	2,300			2,119	
Woodstock, Ont.	11,483	15	1,850	1,460		1,369		
Prince Albert, Sask.	11,050	10	2,208					
Welland, Ont.	11,000	8	1,700	1,450		1,400		
Pembroke, Ont.	10,463	13	2,000	1,300		1,155		
Medicine Hat, Alta.	10,000	10	2,400	1,860		1,740	1,680	
Brockville, Ont.	9,950	11	2,000			1,350	1,300	
Nanaimo, B. C.	7,000	7	1,800	1,620				
Nelson, B. C.	7,000	7	2,100	1,800				
Prince Rupert, B. C.	6,380	7	1,560					

¹ Director of police and fire departments.¹ International Fire Fighter, Washington, A. F. of L. Bldg., April 1940.

Salaries in Fire Departments in Canada, January 1940—Continued

City and Province	Privates (firemen)				Master mechanic	Engineers	Chauffeurs	Electricians	Secretary to chief
	Maximum	Third year	Second year	First year					
Montreal, Que.	\$1,800	\$1,600	\$1,500	\$1,400	\$2,600	\$1,900			
Toronto, Ont.	2,087	1,810	1,682	1,554	3,264			\$2,087	\$3,478
Vancouver, B. C.	1,795	1,795	1,653	1,511	2,445	1,955	\$1,795		2,137
Winnipeg, Man.	1,719	1,561	1,423	1,265	2,214		1,719	1,792	2,320
Hamilton, Ont.	1,850	1,850	1,612	1,507	2,100		1,850	2,100	1,850
Quebec, Que.	1,383	1,248	1,092	936	1,587			1,443	1,600
Ottawa, Ont.	1,751	1,648	1,545	1,442	2,060	1,803		1,751	2,163
Windsor, Ont.	1,800	1,800	1,650	1,500	2,150			1,850	2,000
Edmonton, Alta.	1,667	1,397	1,286	1,200	1,956				1,846
Calgary, Alta.	1,686	1,513	1,401	1,401	1,911				1,746
London, Ont.	1,725	1,725	1,512	1,296	1,792		1,752		1,800
York Township, Ont.	1,550	1,504	1,504	1,404					
Regina, Sask.	1,662	1,470	1,350	1,230	1,842				1,662
St. John, N. B.	1,440	1,440	1,320	1,200	1,700				
Trois Rivières, Que.	1,300	1,300	1,300	1,300		1,352			1,560
Saskatoon, Sask.	1,536	1,492	1,389	1,261	1,624				
Victoria, B. C.	1,695	1,695	1,567	1,320	1,800		1,737		1,476
East York, Ont.	1,560	1,560	1,560	1,560					
Kitchener, Ont.	1,510	1,510	1,344	1,164	1,600			1,560	
Sherbrooke, Que.	1,300	1,040	988	936	1,326	1,404			936
Sudbury, Ont.	1,560	1,560	1,440	1,320					
Hull, Que.	1,200	1,100	1,100	975	1,200			1,350	1,150
Brantford, Ont.	1,643	1,551	1,460	1,369	1,825				
Burnaby, B. C.	1,080	1,080	1,080	960					
St. Catharines, Ont.	1,504	1,504	1,387	1,314					
Westmount, Que.	1,700	1,500	1,400	1,300	1,900			2,340	1,400
Timmins, Ont.	1,800	1,800	1,800	1,500					
Kingston, Ont.	1,205	1,205	1,095	1,095	1,825				
Ft. William, Ont.	1,600	1,600	1,500	1,440		1,750			
Sydney, N. S.	1,320	1,320	1,320	1,200	1,800			1,800	
Oshawa, Ont.	1,480	1,480	1,350	1,300				1,540	
Sault Ste. Marie, Ont.	1,380	1,380	1,380	1,380	1,480				
Peterborough, Ont.	1,400	1,400	1,300	1,200	1,500	1,500		1,525	
Scarborough, Ont.	1,210	1,210	1,210	1,100					
New Westminster, B. C.	1,750	1,750	1,750	1,440					
Guelph, Ont.	1,450	1,450	1,450	1,450	1,475				1,425
Port Arthur, Ont.	1,620	1,620	1,560	1,440	1,740				
Niagara Falls, Ont.	1,560	1,500	1,500	1,500					
Sarnia, Ont.	1,560	1,560	1,380	1,245					
Stratford, Ont.	1,450	1,300	1,150	1,000					
St. Thomas, Ont.	1,500	1,500	1,350	1,275					
Chatham, Ont.	1,480	1,480	1,480	1,200					
Brandon, Man.	1,250	1,250	1,250	1,250	1,500				
North Bay, Ont.	1,386	1,386	1,155	1,155					
Bellefleur, Ont.	1,248	1,248	1,080	1,020					
Galt, Ont.	1,250	1,250	1,250	1,250					
Lethbridge, Alta.	1,543	1,543	1,543	1,543	1,674			1,740	843
Owen Sound, Ont.	1,200	1,100	1,050	1,000					
Forest Hill, Ont.	1,945	1,560	1,456	1,170					1,893
Woodstock, Ont.	1,314	1,314	1,241	1,186	1,369			1,351	
Prince Albert, Sask.	1,452	1,320	1,260	1,020	1,644				
Welland, Ont.	1,400	1,400	1,300	1,200	1,350				1,400
Pembroke, Ont.	1,092	1,000	900	750				1,260	
Medicine Hat, Alta.	1,500	1,440	1,380	1,320					
Brockville, Ont.	1,250	1,250	1,250	1,150					
Nanaimo, B. C.							1,380		
Nelson, B. C.	1,560	1,560	1,560	1,560					
Prince Rupert, B. C.	1,400	1,260	1,260	1,260					

The June 1940 issue of the International Fire Fighter contains a table giving working conditions in the fire departments of the same Canadian cities for 1940, including data on hours in day shifts and night shifts, annual vacations, sick leave, and clothing allowances.

WAGES OF INDUSTRIAL WORKERS IN DENMARK, 1939¹

HOURLY wages of male workers in industry in Copenhagen in the third quarter of 1939 averaged 176 öre, as compared to 172 öre in the first quarter. In the Provinces, average hourly wages rose from 146 öre in the first quarter to 148 öre in the third quarter. Female workers' average hourly wages were the same in both quarters in Copenhagen, 98 öre, but in the Provinces they declined from 94 öre in the first quarter to 93 öre in the third quarter. The following table shows average hourly wages for industrial workers in Denmark in 1939.

Average Hourly Wages of Industrial Workers in Denmark, 1939

[Average exchange rate of krone (100 öre) in 1939=20.3 cents]

Group	Average hourly wages, 1939					
	Entire country		Copenhagen		Provinces	
	First quarter	Third quarter	First quarter	Third quarter	First quarter	Third quarter
	Öre	Öre	Öre	Öre	Öre	Öre
All workers.....	144	147	152	155	136	139
Male workers.....	159	160	172	176	146	148
Skilled.....	172	175	187	192	155	158
Unskilled.....	146	148	155	158	138	140
Female workers.....	96	96	98	98	94	93



SALARIES OF GOVERNMENT EMPLOYEES IN EL SALVADOR, 1939²

SALARIES of civil-service employees in El Salvador were fixed in a law of June 23, 1939, effective from July 1, 1939. Four salary classes are established for each position, the salaries for the first class being those specified in the law. The salaries in the second, third, and fourth classes are, respectively, 90, 80, and 70 percent of the salaries for the first class. The entrance salary is determined by the ability of the appointee, who may, because of merit, be advanced at any time to a higher salary class. These provisions do not apply to certain appointive positions of a political or technical nature, positions in the teaching professions, and positions with monthly salaries of 50 colones³ or less. Government employees are to receive no other remuneration than that specified in the law, except in cases which may be designated by law.

The monthly salaries of certain occupational groups in governmental service fall, in general, within the following limits, varying with locality, governmental office, and type of work:

¹ Denmark. Statistiske Departement. Statistiske Efterretninger, Copenhagen, June 1, 1940.

² Diario Oficial, San Salvador, El Salvador, June 23, 1939.

³ The Salvadoran colon is linked to the U. S. dollar and is worth 40 cents.

*Monthly Salaries, by Occupation, of Government Workers in El Salvador, Under Law
Effective July 1, 1939*

Occupation	Monthly rate	Occupation	Monthly rate
	<i>Colones</i>	Postal employees.—Continued.	
Carpenters.....	60	Letter carriers:	<i>Colones</i>
Chauffeurs.....	60-90	In capital and environs.....	55-75
Clerks.....	25-100	First-class offices.....	25-45
Gardeners.....	40-50	Second-class offices.....	5-35
Janitors.....	20-90	Third-class offices.....	5
Laundresses.....	12	Postmasters:	
Mechanics.....	60-75	First-class offices.....	70-140
Nurses:		Second-class offices.....	15-75
Army.....	20-30	Third-class offices.....	10-15
Hospital.....	20-40	Printing-office workers.....	10.10-4.25
School.....	50	Servants.....	45-50
Visiting.....	75	Stenographers.....	100-150
Orderlies.....	50-75	Teachers (urban or rural primary schools).....	10-95
Porters.....	25-50	Telegraphers.....	100-250
Postal employees:		Telephone messengers.....	55
Clerks:		Telephone operators.....	50-110
First-class offices.....	35-50	Typists.....	65-90
Second-class offices.....	20-45		

¹ Daily rate.

WAGES IN HAITI, 1939 ¹

The wage scale for adult men in Haiti varies between 0.50 and 1.50 gourdes ² per day. The minimum wage for employees and day laborers in public services (not including paid domestic servants) was fixed at 1.50 gourdes per day by the labor law of August 10, 1934; this wage is not to be liable to attachment beyond one-tenth of its total, and not more than one-third of the total salary of salaried employees and clerks is liable to assignment.

The population of Haiti is estimated at 3,000,000 inhabitants, or about 275 persons per square mile, a density of population greater than that in any other of the American Republics, and approximately equivalent to that of New York State. The population as a whole is predominantly rural, and the Republic has a completely agricultural economy. Nine-tenths of the population is engaged in agriculture; Haiti is a land of thousands of small farms which supplement with produce the wages of workers.

¹ Foreign Agriculture, U. S. Department of Agriculture, Washington, December 1939, p. 589; International Labor Office, Geneva, Legislative Series, 1934-Haiti 1 (Art. 11); Haiti, Pan American Union, Washington, 1938, pp. 13, 18 (American Nation Series, No. 11).

² The Haitian gourde is linked to the U. S. dollar at the rate of 5 gourdes to the dollar. One gourde is therefore worth 20 cents.

Family Allowances

FAMILY ALLOWANCES IN THE UNITED STATES ARMY AND NAVY IN THE WORLD WAR

THE problem of helping to care for the families of enlisted men in the military and naval forces of the United States in 1917-21 was met by requiring the men to make allotments from their pay to their dependents and by granting Government money allowances to the enlisted men's dependents. The amounts of these allowances varied with the number and class of the dependents, the maximum total for the dependents of any one man being \$50.

The family allowance was paid from enlistment until death in the service or for 1 month after a man was discharged from the service, but for not over 1 month after the end of the existing war emergency. No family allowances were granted for the period prior to November 1, 1917.

Under specified conditions, limitations, and exceptions, monthly family allowances were payable as follows:¹

Class A.—In the case of a man to his wife (including a former wife divorced) and to his child or children:

- (a) If there is a wife but no child, \$15.
- (b) If there is a wife and one child, \$25.
- (c) If there is a wife and two children, \$32.50, with \$5 per month additional for each additional child.
- (d) If there is no wife, but one child, \$5.
- (e) If there is no wife, but two children, \$12.50.
- (f) If there is no wife, but three children, \$20.
- (g) If there is no wife, but four children, \$30, with \$5 per month additional for each additional child.
- (h) If there is a former wife divorced who has not remarried and to whom alimony has been decreed, \$15.

Class B.—In the case of a man or woman, to a grandchild, a parent, brother, or sister:

- (a) If there is one parent, \$10.
- (b) If there are two parents, \$20.
- (c) If there is a grandchild, brother, sister, or additional parent, \$5 for each.

In the case of a woman, the family allowances for a husband and children shall be in the same amounts, respectively, as are payable, in the case of a man, to a wife and children, provided she makes a voluntary allotment of \$15 as a basis therefor, and provided, further, that dependency exists * * *.

¹ 40 Stat. 398, 609.

It was also provided that family allowances for dependents in class A should be paid "only if and while a compulsory allotment is made to a member or members of such class." Persons in Class B were eligible for family allowances only while they were dependent in whole or in part on the enlisted man, and while he was making a monthly allotment of pay to such dependents, subject to certain exceptions and limitations.

An act of 1917, amending the act authorizing the establishment of a War Risk Insurance Bureau, appropriated \$141,000,000, which was designated "the military and naval family allowance appropriation."² The War and Navy Departments, respectively, were instructed to pay over to the Treasury Department monthly the allotments of pay for distribution to the dependents of enlisted men, and both the pay allotments and the family allowances were paid by the War Risk Insurance Bureau to or for the beneficiaries.

An amendment in 1919 to the War Risk Insurance Act provided that all family allowances payable by the War Risk Insurance Bureau should be discontinued at the close of the fourth calendar month after the termination of the existing war emergency, as declared by proclamation of the President, and subsequently all allotments of pay should be voluntary.³ In accordance with a Joint Resolution (H. J. Res. 382) of March 3, 1921, "declaring that certain acts of Congress, joint resolutions, and proclamations shall be construed as if the war had ended and the present or existing emergency expired,"⁴ family allowances were discontinued in July 1921.



NETHERLANDS FAMILY ALLOWANCE ACT, 1939

AN ACT providing for a general family-allowance scheme in the Netherlands was promulgated December 23, 1939.⁵ Even before the enactment of this law, family allowances were quite common in that country, as such grants were made to Government officials and employees and to school teachers, and also, by private arrangement or collective agreements, to some workers in private industry. In 1936 the total number of persons receiving these allocations was estimated at 300,000. In 1922, and again in 1934, unsuccessful attempts were made to secure the passage of legislation for a general scheme of family allowances. The organizations of large employers and also of workers were for a considerable period more or less against such a measure, while the organizations of Christian employers and workers were strongly in favor of it. In 1938 a new legislative

² Additional appropriations were made in 1918 (40 Stat. 1024), and in 1919 41 Stat. 1 and 172).

³ 41 Stat. 372.

⁴ 41 Stat. 1359.

⁵ International Labor Office, *Industrial and Labor Information*, Geneva, May 13, 1940.

proposal was made by the Minister of Social Affairs, which became the act of December 23, 1939, making it compulsory for every employer having one or more wage earners on his pay roll in an undertaking to become a member of a family allowance fund.

A résumé of the principal provisions of this law are given below.

Persons Covered

Every wage earner employed by an undertaking or by a community is eligible for a family allowance for each child, under 15 years of age, beginning with the third. Exception is made in the case of those wage earners who have "advantages at least equivalent to those provided by the Act under special recognized family allowance schemes set up by a community, the Netherlands Railway Company, or other undertakings."

Amount of Allowance

The allowance varies according to the wage, the minimum being 10 cents a day for workers earning 100 florins or less per month, 24 florins or less per week, or 4 florins or less per day, and the maximum being 25 cents per day for workers earning over 200 florins per month, 48 florins per week, or 8 florins per day. Under section 73 of the act, the family allowance received by a wage earner shall be considered a part of his wages.

Financing Allowances

Family allowances and their administration are to be financed entirely by the employers. Their contributions are fixed each year for the following 12 months, on the basis of, and in proportion to, each employer's total wage bill. It is estimated that the allowances represent approximately 1 percent of the combined wages paid or approximately 18 million florins per annum.

Family Allowance Funds

Family allowance funds, according to provisions of the law, may be organized: (1) By industrial councils (joint advisory bodies established under a special act); (2) by occupational associations, which the Sickness Insurance Act recognizes under conditions set forth under section 89 of that act, with a managing committee which includes equal numbers of employers and workers. When, however, an industrial council has been constituted for a specified industry or branch of industry, any other fund formed by a recognized occupational association is to discontinue its functions, which will thereafter be performed only by the industrial council's fund. The Minister responsible for the enforcement of the act must approve any exception to this rule. Employers who are not members of either an allowance

fund established by a works council or one formed by a recognized occupational association, will be affiliated automatically with the National Family Allowance Fund.

Equalization of Machinery

The act establishes a family allowance equalization fund, separately administered by the State Insurance Bank, which already has the responsibility of administering accident, invalidity, and old-age insurance. At the close of the fiscal year, the family allowance funds in which the contributions received are greater than the amount of the allowances granted will transfer the available surplus to the National Family Allowance Equalization Fund, which in turn will make up the deficit of those family allowance funds "which have received contributions lower in amount than that of the allowances paid." When the resources of the National Equalization Fund are inadequate, it may borrow, paying interest, from the Invalidity and Old-Age Fund.

Supervision and Penalties

The Supervisory College provided for under section 20 of the Sickness Insurance Act is entrusted with the supervision and enforcement of the Family Allowance Act.

Persons included under section 141 of the Penal Code, and State and communal police officers, members of the State Insurance Bank's board of directors, chairmen of labor councils, etc., are charged with the duty of seeing that the act is applied and of inquiring into any infringements, for which various penalties are imposed.

Details of application will be set forth in a number of public administrative regulations. Similar provisions, based on the principle of reciprocity in the legislation of other national Governments, may make it possible for wage earners not domiciled in the Netherlands to benefit under family-allowance schemes.



FAMILY ALLOWANCES IN SPANISH AGRICULTURE

APPLICATION to agriculture of the compulsory family-allowance system provided for in Spain under an act of July 18, 1938,¹ and a decree of October 20, 1938, was so difficult that it became necessary to issue special regulations for agriculture. These are included in an act of September 1, 1939, which relates especially to family allowances in agriculture, in regulations dated October 6, 1939, with reference to application of the act, and in an order of January 17, 1940. A summary of the principal provisions thereof is given below.²

¹ See *Monthly Labor Review* for May 1939 (p. 1038-1039).

² International Labor Office. *Industrial and Labor Information*, Geneva, April 29, 1940.

The right of family allowances is extended to agricultural workers employed by another person, and also to proprietors, cultivators, leaseholders, share farmers, etc., who are directly engaged in farming without the aid of permanent workers or domestic assistants. The names of the persons entitled to family allowances must be entered in a local register of such persons, which must be kept up to date by the family-allowance committee for the locality.

Employers must bear the entire cost of financing the allowances, their contributions being based in part on the assessed land value and in part on their wages bill. In case of land held on lease or cultivated on shares, landlords may require their leaseholders or tenants to refund the contributions paid. The amount of the allowance is based on a monthly schedule, regardless of the number of days the recipient has been employed.

The act itself provided that before it became operative on January 1, 1940, a ministerial order should fix the amount to be contributed by employers. According to the report under review, this order had not been issued because the proper minister had not been in a position to fix the contributions, the local committees charged with preparation of the registers of persons eligible for allowances not having been able to furnish complete information in the time required. On account of this delay, the Minister of Labor, on January 17, 1940, issued a new order to the Director-General of Welfare, extending the period in which the lists of persons eligible for allowances might be prepared, and suspending until further notice the coming into operation of the special family-allowance system in agriculture.

In the meantime agricultural workers and stock raisers are still included in the general provisions for family allowances in the legislation of 1938, and these benefits are paid only to those workers whose names are found on employers' lists. The workers also continue to share in the contributions to the family-allowance fund. The employers make such payments on the basis of 6 percent of the wage, 1 percent representing the contribution of the workers.

Labor Turn-Over

LABOR TURN-OVER IN MANUFACTURING, MAY 1940

SEPARATIONS per 100 employees in about 5,900 manufacturing establishments, with nearly 2½ million employees, exceeded accessions in May, as indicated by the separation rate of 3.78 and the accession rate of 3.36. Both these rates were above those for April, 3.66 and 3.05, respectively. The quit rate rose slightly from 0.74 to 0.77, and the lay-off rate from 2.69 to 2.78. The discharge and miscellaneous separation rates remained unchanged at 0.13 and 0.10.

Notable increases in the accession rate were indicated in the men's clothing industry in which the rate increased from 1.98 to 4.70. The separation rate of 8.08 for this industry, although considerably below that of 11.09 for the preceding month, was, nevertheless, nearly twice as high as the accession rate. Other pronounced changes were shown in the radio and phonograph industry where the hiring rate rose from 4.28 to 7.80 and the total separation rate declined from 3.56 to 2.64. In woolen and worsted goods, the rate increased from 4.37 to 9.06 and the separation rate declined from 9.47 to 6.36 per 100 employees.

TABLE 1.—Monthly Labor Turn-Over Rates in Representative Factories in 135 Industries¹

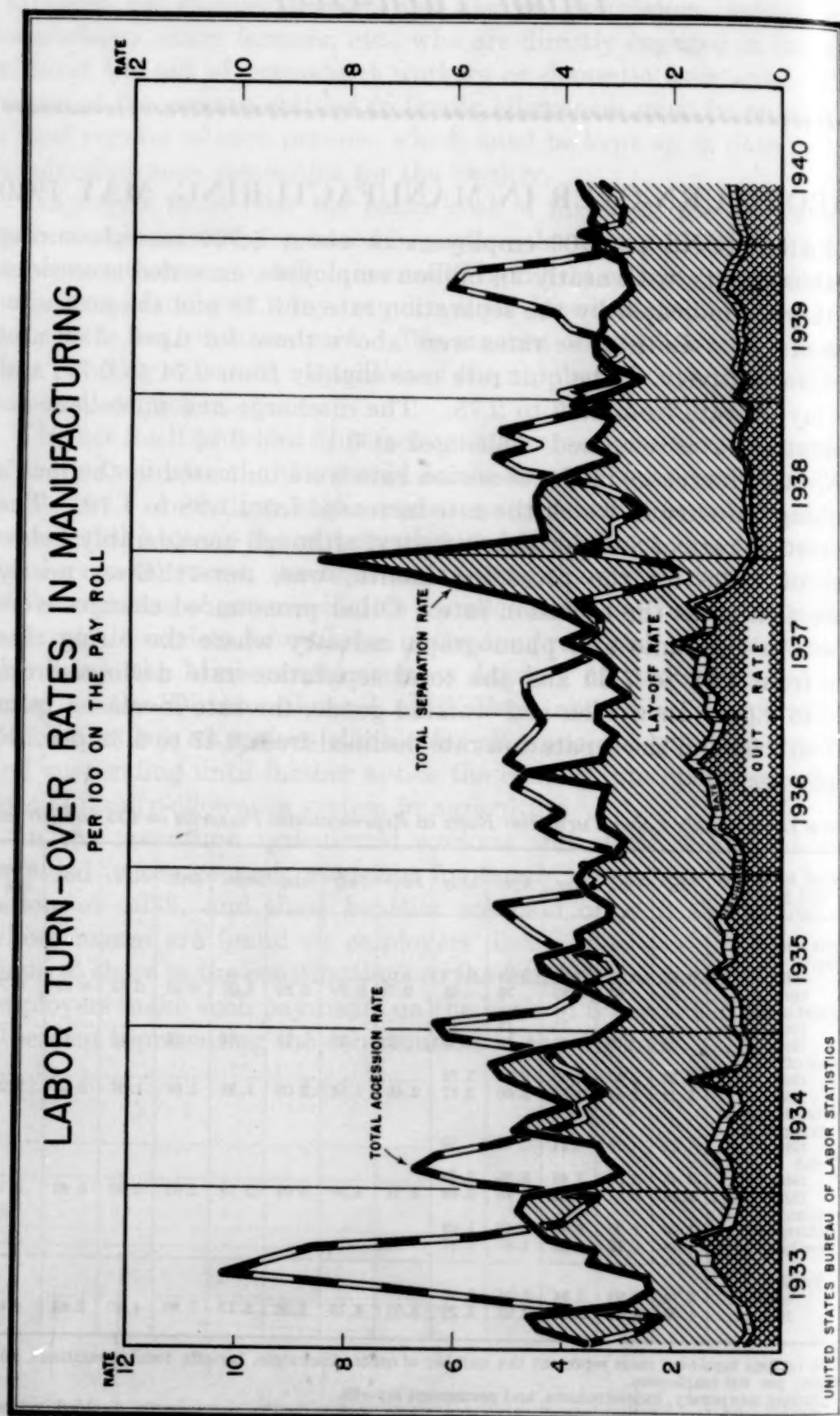
Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Separations:													
Quits:													
1940.....	0.63	0.62	0.67	0.74	0.77								
1939.....	.85	.64	.82	.76	.68	0.73	0.70	0.82	1.07	0.93	0.83	0.69	0.79
Discharges:													
1940.....	.14	.16	.15	.13	.13								
1939.....	.10	.10	.13	.10	.13	.12	.12	.14	.14	.17	.15	.12	.13
Lay-offs: ²													
1940.....	2.55	2.67	2.53	2.69	2.78								
1939.....	2.24	1.87	2.23	2.60	2.67	2.46	2.54	2.05	1.58	1.81	1.97	2.65	2.22
Miscellaneous separations: ³													
1940.....	.11	.11	.11	.10	.10								
Total:													
1940.....	3.43	3.56	3.46	3.66	3.78								
1939.....	3.19	2.61	3.18	3.46	3.48	3.31	3.36	3.01	2.79	2.91	2.95	3.46	3.14
Accessions: ⁴													
Rehires 1940.....	1.96	1.26	1.38	1.42	1.49								
New hires 1940.....	1.78	1.72	1.56	1.63	1.87								
Total:													
1940.....	3.74	2.98	2.94	3.05	3.36								
1939.....	4.09	3.06	3.34	2.93	3.29	3.92	4.16	5.06	6.17	5.89	4.10	2.84	4.07

¹ The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

² Including temporary, indeterminate, and permanent lay-offs.

³ Beginning with January 1940, miscellaneous separations, such as deaths, permanently disabled, retired on pensions, etc., have been reported separately. Such separations were formerly reported under the classification "quits and miscellaneous separations."

⁴ Beginning with January 1940, accessions have been separated into two classifications; rehires, which include workers hired after a separation of 3 months or less, and other employees hired.



In the aircraft industry, the accessions far exceeded separations, as the respective rates of 11.77 and 2.69 showed; furthermore, out of every 12 people hired, 11 were new hires. The cement industry showed a decline from 9.20 to 3.62 in the accession rate accompanied by a total separation rate of 0.82 compared with 1.36 for the preceding month. A substantial increase from 5.74 to 8.79 in the total separation rate was shown in the automobile parts industry; a slight decline from 4.19 to 4.03 occurred in the accession rate.

Analysis by Industries

In addition to the rates for all industries combined, detailed labor turn-over data are available for 36 separate manufacturing industries.

Lower lay-off rates occurred in 18 industries. Marked decreases were indicated in the men's clothing industry which showed a decline from 10.22 in April to 6.99 in May; radios and phonographs from 2.32 to 0.97; shipbuilding from 6.53 to 4.66; and woolen and worsted goods from 8.67 to 5.21. A pronounced increase in the lay-off rate from 4.79 to 7.53 occurred in plants manufacturing automobile parts.

In 20 of the 36 industries, new hires comprised the greater part of the total accessions. Outstanding among these were aircraft with a rehire rate of 0.82 and a new hire rate of 10.95; machine tools, 0.47 and 3.68; and paper and pulp, 0.53 and 2.19.

TABLE 2.—Monthly Labor Turn-Over Rates (per 100 Factory Employees) in 36 Manufacturing Industries ¹

Class of turn-over	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939
	Agricultural implements *			Aircraft			Automobiles and bodies		
Separations.....	4.05	3.05	3.78	2.69	2.69	2.83	6.28	6.37	4.63
Quits.....	.52	.62	.41	2.23	2.00	1.55	.87	.68	.54
Discharges.....	.10	.08	.11	.35	.40	.53	.05	.06	.07
Lay-offs.....	3.32	2.26	3.26	.09	.27	.75	5.30	5.57	4.02
Miscellaneous separations ².....	.11	.09	-----	.02	.02	-----	.06	.06	-----
Accessions ³	1.36	2.16	2.05	11.77	10.14	9.60	2.33	2.29	2.38
Rehires.....	.50	1.07	-----	.82	1.94	-----	1.28	1.20	-----
New hires.....	.86	1.09	-----	10.95	8.20	-----	1.05	1.09	-----
	Automobile parts			Boots and shoes			Brass, bronze and copper products *		
Separations.....	8.79	5.74	8.13	5.44	4.19	6.96	2.45	3.39	2.43
Quits.....	.93	.74	.61	.59	.72	.62	.67	.53	.50
Discharges.....	.22	.13	.15	.10	.11	.11	.06	.08	.04
Lay-offs.....	7.53	4.79	7.37	4.70	3.30	6.23	1.65	2.63	1.89
Miscellaneous separations ².....	.11	.08	-----	.05	.06	-----	.07	.15	-----
Accessions ³	4.03	4.19	3.93	1.60	1.49	2.04	3.22	2.22	2.01
Rehires.....	1.57	1.91	-----	1.02	.80	-----	1.86	1.53	-----
New hires.....	2.46	2.28	-----	.58	.69	-----	1.36	.69	-----

See footnotes at end of table.

TABLE 2.—Monthly Labor Turn-Over Rates (per 100 Factory Employees) in 36 Manufacturing Industries—Continued

Class of turn-over	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939
	Brick, tile, and terra cotta			Cast-iron pipe			Cement		
Separations.....	4.33	5.39	3.06	1.43	1.22	2.10	0.82	1.36	5.03
Quits.....	.75	.55	.73	.81	.26	.81	.22	.17	.32
Discharges.....	.09	.09	.12	.17	.33	.20	.07	.06	.09
Lay-offs.....	3.44	4.69	2.21	.41	.49	1.09	.44	.97	4.62
Miscellaneous separations ².....	.05	.06	.....	.04	.14	.....	.09	.16	.....
Accessions ³	7.37	7.90	9.70	2.39	1.54	2.64	3.62	9.20	5.93
Rehires.....	4.13	5.49	.....	.93	.63	.....	1.16	6.51	.....
New hires.....	3.24	2.41	.....	1.46	.91	.....	2.46	2.69	.....
	Cigars and cigarettes			Cotton manu- facturing			Dyeing and finish- ing textiles ^a		
Separations.....	2.12	2.30	2.43	5.94	5.28	4.18	3.04	3.85	4.45
Quits.....	1.16	1.16	1.39	1.48	1.36	1.34	.95	.79	.84
Discharges.....	.17	.12	.14	.23	.17	.23	.13	.13	.16
Lay-offs.....	.63	.89	.90	4.11	3.66	2.61	1.92	2.88	3.45
Miscellaneous separations ².....	.16	.22	.....	.12	.09	.....	.04	.05	.....
Accessions ³	3.31	2.52	3.61	3.46	3.02	2.96	1.41	2.08	1.52
Rehires.....	.79	1.07	.....	1.64	1.31	.....	.83	1.40	.....
New hires.....	2.52	1.45	.....	1.82	1.71	.....	.58	.68	.....
	Electrical machinery			Foundries and machine shops			Furniture		
Separations.....	2.23	1.73	2.94	2.94	2.51	2.47	3.44	3.42	4.83
Quits.....	.55	.43	.50	.74	.66	.47	.95	.84	.73
Discharges.....	.06	.06	.09	.17	.17	.07	.19	.20	.19
Lay-offs.....	1.44	.96	2.35	1.93	1.58	1.93	2.17	2.28	3.91
Miscellaneous separations ².....	.18	.28	.....	.10	.10	.....	.13	.10	.....
Accessions ³	2.20	1.90	2.09	1.36	2.53	2.28	4.01	3.43	5.31
Rehires.....	.99	.69	.....	.94	.80	.....	2.61	1.54	.....
New hires.....	1.21	1.21	.....	.42	1.73	.....	1.40	1.89	.....
	Glass			Hardware			Iron and steel		
Separations.....	3.30	2.17	8.32	3.21	2.39	2.29	1.71	2.55	1.56
Quits.....	.28	.31	.48	1.16	.82	.65	.38	.40	.35
Discharges.....	.04	.05	.19	.09	.07	.14	.06	.08	.05
Lay-offs.....	2.90	1.72	7.65	1.85	1.45	1.50	1.12	1.92	1.16
Miscellaneous separations ².....	.08	.09	.....	.11	.05	.....	.15	.15	.....
Accessions ³	1.92	2.55	2.53	2.17	1.36	1.51	3.53	1.12	1.10
Rehires.....	.74	1.46	.....	.35	.53	.....	1.75	.64	.....
New hires.....	1.18	1.09	.....	1.82	.83	.....	1.78	.48	.....
	Knit goods			Machine tools			Men's clothing		
Separations.....	4.47	2.91	2.76	2.36	1.90	1.16	8.08	11.09	6.46
Quits.....	.83	.72	.95	1.29	1.14	.75	.66	.75	.69
Discharges.....	.12	.08	.08	.44	.40	.05	.38	.08	.06
Lay-offs.....	3.48	2.12	1.73	.53	.25	.36	6.99	10.22	5.71
Miscellaneous separations ².....	.04	.02	.....	.10	.11	.....	.05	.04	.....
Accessions ³	1.33	2.02	1.87	4.15	4.51	3.56	4.70	1.98	3.93
Rehires.....	.60	1.12	.....	.47	.16	.....	3.30	1.04	.....
New hires.....	.73	.90	.....	3.68	4.35	.....	1.40	.94	.....

See footnotes at end of table.

TABLE 2.—Monthly Labor Turn-Over Rates (per 100 Factory Employees) in 36 Manufacturing Industries—Continued

Class of turn-over	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939	May 1940	April 1940	May 1939
	Paints and varnishes			Paper and pulp			Petroleum refining		
Separations.....	2.02	1.64	2.69	1.70	1.31	1.79	1.39	1.10	2.10
Quits.....	.57	.47	.88	.51	.43	.50	.23	.15	.28
Discharges.....	.25	.14	.17	.10	.11	.12	.05	.05	.14
Lay-offs.....	1.07	.95	1.64	.91	.60	1.17	1.01	.73	1.68
Miscellaneous separations ¹.....	.13	.08	-----	.18	.17	-----	.10	.17	-----
Accessions ²	2.60	2.00	2.63	2.72	1.91	1.53	2.62	2.22	4.30
Rehires.....	.83	.50	-----	.53	.60	-----	1.17	.66	-----
New hires.....	1.77	1.50	-----	2.19	1.31	-----	1.45	1.56	-----
	Printing and publishing						Radios and phonographs		
	Book and job			Newspapers					
Separations.....	4.37	4.31	4.13	2.10	2.00	2.47	2.64	3.56	3.51
Quits.....	.51	.61	.52	.26	.33	.28	1.39	1.08	1.45
Discharges.....	.22	.19	.13	.15	.06	.09	.25	.12	.12
Lay-offs.....	3.46	3.39	3.48	1.60	1.52	2.10	.97	2.32	1.94
Miscellaneous separations ¹.....	.18	.12	-----	.09	.09	-----	.03	.04	-----
Accessions ²	3.82	4.42	4.23	1.75	1.98	2.68	7.80	4.28	8.73
Rehires.....	2.43	2.42	-----	1.06	1.06	-----	4.61	2.72	-----
New hires.....	1.39	2.00	-----	.69	.92	-----	3.19	1.56	-----
	Rayon and allied products			Rubber boots and shoes			Rubber tires		
Separations.....	0.95	3.10	2.45	3.72	3.16	5.85	2.46	2.31	3.24
Quits.....	.57	2.43	.51	.78	.58	.88	.33	.27	.51
Discharges.....	.11	.15	.15	.21	.12	.04	.05	.05	.07
Lay-offs.....	.25	.49	1.79	2.56	2.19	4.93	1.85	1.88	2.66
Miscellaneous separations ¹.....	.02	.03	-----	.17	.27	-----	.23	.11	-----
Accessions ²	2.16	4.00	2.30	3.21	2.50	1.91	1.35	1.70	1.19
Rehires.....	.73	1.05	-----	1.71	1.92	-----	.87	1.25	-----
New hires.....	1.43	2.95	-----	1.50	.58	-----	.48	.45	-----
	Sawmills			Shipbuilding			Silk and rayon goods		
Separations.....	4.19	4.15	3.58	5.95	8.06	2.18	6.90	6.01	5.83
Quits.....	1.11	1.09	1.14	.85	1.17	.64	.78	.93	1.10
Discharges.....	.19	.22	.20	.29	.30	.17	.10	.05	.06
Lay-offs.....	2.76	2.74	2.24	4.66	6.53	1.37	5.90	4.91	4.67
Miscellaneous separations ¹.....	.13	.10	-----	.15	.06	-----	.12	.12	-----
Accessions ²	5.45	5.71	6.29	6.83	6.24	5.26	3.10	3.56	1.90
Rehires.....	1.99	2.71	-----	2.59	1.68	-----	1.97	2.05	-----
New hires.....	3.46	3.00	-----	4.24	4.56	-----	1.13	1.51	-----
	Slaughtering and meat packing			Steam and hot-water heating apparatus			Woolen and worsted goods		
Separations.....	6.13	7.60	4.20	1.69	1.58	1.94	6.36	9.47	2.95
Quits.....	.55	.46	.58	.86	.54	.65	1.02	.61	.96
Discharges.....	.17	.23	.14	.10	.08	.07	.07	.11	.09
Lay-offs.....	5.14	6.73	3.48	.65	.87	1.22	5.21	8.67	1.90
Miscellaneous separations ¹.....	.27	.18	-----	.08	.09	-----	.06	.08	-----
Accessions ²	8.15	6.48	7.35	1.92	1.51	1.34	9.06	4.37	11.85
Rehires.....	5.62	4.68	-----	.92	.47	-----	8.01	3.82	-----
New hires.....	2.53	1.80	-----	1.00	1.04	-----	1.05	.55	-----

¹Included this month for the first time.²No individual industry data shown unless reports cover at least 25 percent of industrial employment³Prior to January 1940 miscellaneous separations were included with "quits."⁴No break-down of accessions prior to January 1940.

Trend of Employment and Pay Rolls

SUMMARY OF REPORTS FOR JUNE 1940

Total Nonagricultural Employment

THE return of approximately 255,000 workers to jobs in nonagricultural industries between May and June raised the June employment level to the highest point reached this year, an increase of more than 900,000 workers over June 1939. Gains were reported in all major groups of nonagricultural employment except mining.

Factory employment showed a rise of about 30,000 from May to June, although usually there is a decline of about 60,000 at this season of the year. Approximately 80,000 more workers were employed on public and private construction work in June than in the preceding month and about 35,000 were added by utility and transportation companies. Retail and wholesale trade employment increased by 34,000 and the financial, service, and miscellaneous industries absorbed 28,000 additional workers. Employment in the Federal, State, and local government service, including navy yards and arsenals, and the armed forces of the United States, was about 57,000 higher than in the preceding month. In the group of mining industries there was a net decline of about 7,000 workers, due to seasonal recessions in anthracite and bituminous-coal mining. Metal mines, quarries, and crude-petroleum producing firms reported gains over the month interval.

These figures do not include emergency employment which decreased 317,000, as follows: 255,000 on projects operated by the Work Project Administration, 26,000 on the out-of-school work program of the National Youth Administration, and 36,000 in the Civilian Conservation Corps.

Industrial and Business Employment

Employment gains from May to June were shown by 51 of the 90 manufacturing industries surveyed and by 12 of the 16 nonmanufacturing industries covered. Pay rolls were larger in 53 of the manufacturing and in 12 of the nonmanufacturing industries.

The employment gain of 0.4 percent, or about 30,000 workers, in manufacturing industries as a whole was accompanied by a gain of 1.7 percent, or approximately \$3,200,000, in weekly pay rolls.

War-materials industries continued to expand their operations. Among them was aircraft manufacturing with a gain of 5,300 workers over the month interval, and a gain of 46,500 workers when compared with the average for 1937. The corresponding gains for shipbuilding were 2,500 and 26,300, for engine manufacturing 2,900 and 17,500, for machine tool manufacturing 2,200 and 17,600, for aluminum manufacturing 500 and 3,300, and for explosives 500 and 2,100. In other lines of manufacturing activity, employment in June was generally below the peak months of 1937.

Among other manufacturing industries affected directly or indirectly by war orders were the steel industry with 21,100 more workers in June than in May, the woolen and worsted goods industry with 6,900 more workers, the men's clothing industry with 6,300 more workers, and the electrical machinery industry with 3,100 more workers. A seasonal gain of 32,800 wage earners was shown by the canning industry, and smaller but substantial seasonal gains were shown by the ice-cream, beverage, and tin-can industry, as well as by a number of building material industries. The most pronounced losses in manufacturing employment over the month interval were seasonal in character and were shown by automobile plants (20,200 workers), women's clothing firms (18,500 workers), cotton mills (8,400), fertilizer plants (7,500), hardware firms (7,400), and plants engaged in dyeing and finishing textiles (4,500).

Wage-rate increases affecting nearly 27,000 factory wage earners were reported in June by 87 cooperating establishments. These wage-rate increases affected over 6,000 workers in the shipbuilding industry, more than 5,000 workers in the paper and pulp industry, over 4,000 in the electrical machinery industry, over 2,000 in the rayon industry, about 1,500 in the chemical industries, over 1,000 in engine plants, and a like number in beverage establishments. As the Bureau's survey does not cover all establishments in an industry and some firms may have failed to report wage changes, these figures should not be construed to represent the total number of wage changes occurring in manufacturing industries.

In retail stores, the employment gain of 0.3 percent was accompanied by a pay-roll increase of 1.2 percent. Department stores increased their staffs by 0.9 percent while variety stores reported a small employment loss (0.4 percent). Employment in groceries remained virtually unchanged. Men's clothing stores took on 6.6 percent more employees; shoe stores, 5.7 percent; fuel and ice dealers, 4.7 percent; and dealers in dairy products and milk, 2.5 percent. Stores handling feed and other farm supplies decreased employment seasonally by 5.8 percent, and women's ready-to-wear clothing by 2.4 percent.

The employment gain of 0.5 percent in wholesale trade reflected the increase in employees of dealers in various important wholesale

lines including food, groceries, farm products, and petroleum. In lumber and building materials, the increase of 5.2 percent was materially higher than the average June increase for the past 6 years, and also higher than the June 1937 gain of 3.1 percent. Dealers in iron and steel scrap increased employment contraseasonally by 6.3 percent and firms handling metals and minerals took on 1.5 percent more employees.

Employment in anthracite mines decreased seasonally between mid-May and mid-June by 3.9 percent, but slightly increased production raised pay rolls by 1.6 percent. Bituminous-coal mines decreased both employment and pay rolls by 1.7 percent.

In metal mines, gains in employment and pay rolls of 1.8 percent and 1.6 percent, respectively, reflected better-than-seasonal activity. Increased wage rates affecting 2,000 workers in lead and zinc mines were reported by cooperating firms. The employment and pay-roll indexes for metal mining—70.4 percent and 66.8 percent, respectively, of the 1929 averages—reached the highest points since the latter months of 1937, the pay-roll index standing 24 percent above the level of June 1939. Quarries reported the usual June increase in number of workers (1.7 percent) and employment in the oil fields registered a slight gain (0.9 percent). In the utilities, the increases of 0.9 percent in telephone and telegraph and 0.8 percent in electric light and power personnel were slightly more pronounced than is usual in June. Pay rolls in these two industries have been maintained at a relatively higher level than employment, the pay-roll gains of 0.1 percent in the telephone and telegraph industry and 0.9 percent in the electric light and power industry raising the respective indexes to 98.9 percent and 105.1 percent of the 1929 average. The current employment levels are substantially lower than the pay-roll levels. Small employment and pay-roll gains were reported for street railways and busses.

Early summer losses of 2.3 percent in employment and 1.5 percent in pay rolls occurred in year-round hotels. Better-than-seasonal gains in employment were reported by laundries (3.5 percent) and dyeing and cleaning plants (3.4 percent). The employment indexes of both industries were higher than the 1929 averages. Slight decreases in personnel and pay rolls occurred in brokerage firms, while insurance companies took on 0.6 percent more employees.

Employment in the private building industry showed an increase of 5.1 percent from May to June, according to reports from 15,307 contractors employing 164,725 workers. Weekly pay rolls increased 5.0 percent. Compared with June 1939, employment was 9.3 percent and pay rolls 13.1 percent higher. Eight of the nine geographic divisions showed employment gains over the month interval, and one, the East South Central, showed an employment decline. The strongest gains were registered in the East North Central, South Atlantic, and

Mountain States. Employment by general building contractors increased 8.9 percent and by special trade contractors 2.3 percent. Firms engaged in plumbing, brick and stone masonry work, tile and terrazo work, structural steel erection, and glazing, continued to increase employment in June. Curtailed employment following strong spring activity was registered by carpentering, excavating, and painting and decorating contractors. The reports on which the building construction figures are based do not cover construction projects financed by the Work Projects Administration, the Public Works Administration, and the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, or local governments.

A preliminary report of the Interstate Commerce Commission showed an employment gain by class I railroads of 2.2 percent, or nearly 22,300 workers, between May and June. The total number employed in June was 1,035,079. Corresponding pay-roll figures were not available when this report was prepared. For May, they were \$160,733,166, an increase of 3.4 percent over April.

Hours and earnings.—The average hours worked per week by manufacturing wage earners were 37.5 in June, a gain of 0.8 percent over May. The corresponding average hourly earnings were 67.2 cents, an increase of 0.4 percent from the preceding month. The average weekly earnings of factory workers were \$25.79, an increase of 1.2 percent over May.

Of the 14 nonmanufacturing industries for which man-hours are available, 8 showed gains in average hours worked per week and 11 showed gains in average hourly earnings. Eight of the 16 nonmanufacturing industries surveyed reported gains in weekly earnings.

Employment and pay-roll indexes and average weekly earnings for June 1940 are given in table 1 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads. Percentage changes over the month and year intervals are also given.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, June 1940 (Preliminary Figures)*

Industry	Employment			Pay rolls			Average weekly earnings		
	Index, June 1940	Percentage change from—		Index, June 1940	Percentage change from—		Average in June 1940	Percentage change from—	
		May 1940	June 1939		May 1940	June 1939		May 1940	June 1939
All manufacturing industries combined ¹	(1923-25 = 100) 99.4	+0.4	+6.4	(1923-25 = 100) 97.9	+1.7	+13.2	\$25.79	+1.2	+6.4
Class I steam railroads ²	57.9	+2.2	+4.2	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite ⁴	50.2	-3.9	-2.1	40.6	+1.6	+12.6	26.63	+5.7	+15.0
Bituminous ⁴	83.7	-1.7	+6.9	74.0	-1.7	+11.3	23.83	-.1	+4.1
Metalliferous mining	70.4	+1.8	+14.3	66.8	+1.6	+24.1	29.56	-.1	+8.6
Quarrying and nonmetallic mining	47.7	+1.7	+.8	43.3	+1.3	+3.8	22.65	-.4	+2.9
Crude-petroleum production	63.8	+.9	-4.8	58.7	+(⁵)	-6.0	33.74	-.9	-1.3
Public utilities:									
Telephone and telegraph ⁶	77.9	+.9	+2.1	98.9	+.1	+3.4	731.18	-.8	+1.3
Electric light and power ⁶	91.3	+.8	+2.4	105.1	+.9	+3.8	735.10	+(⁵)	+1.3
Street railways and busses ⁶ ⁸	68.6	+.4	-.9	70.0	+1.1	-(⁵)	733.62	+7	+1.0
Trade:									
Wholesale ⁹	89.3	+.5	+1.4	77.9	+.7	+2.7	730.61	+.2	+1.3
Retail ⁹	91.5	+.3	+2.3	84.4	+1.2	+4.1	721.55	+.9	+1.7
Hotels (year-round) ⁴ ¹⁰	91.2	-2.3	-1.7	81.8	-1.5	-.3	715.49	+.8	+1.4
Laundries ⁴	102.5	+3.5	+3.9	92.3	+4.3	+6.2	18.47	+.8	+2.2
Dyeing and cleaning ⁴	112.5	+3.4	+2.1	89.6	+4.9	+6.4	21.75	+1.4	+4.2
Brokerage	(³)	-.3	+1.6	(³)	-.7	+1.8	737.24	-.5	+3
Insurance	(³)	+.6	+1.5	(³)	-.1	+1.5	736.75	-.7	-(⁵)
Building construction	(³)	+5.1	+9.3	(³)	+5.0	+13.1	31.94	-.2	+3.4
Water transportation ¹¹	78.0	-4.5	(³)	(³)	(³)	(³)	(³)	(³)	(³)

¹ Revised indexes; adjusted to 1937 Census of Manufactures.² Preliminary; source—Interstate Commerce Commission.³ Not available.⁴ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, *Employment and Pay Rolls*.⁵ Less than 1/10 of 1 percent.⁶ Retail-trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Not comparable with indexes published in pamphlets prior to January 1940 or in the *Monthly Labor Review* prior to April 1940. Revised series available upon request.⁷ Average weekly earnings not strictly comparable with figures published in issues of the pamphlet dated earlier than January 1938, or in the *Monthly Labor Review* dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.⁸ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.⁹ Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet or February 1935 and subsequent issues of *Monthly Labor Review*.¹⁰ Cash payments only; the additional value of board, room, and tips cannot be computed.¹¹ Based on estimates prepared by the United States Maritime Commission.

Public Employment

In contrast with employment on other construction programs, the number of men at work on construction projects financed from Public Works Administration funds decreased in the month ending June 15. Approximately 92,000 workers, a decrease of 6,000 from the month ending May 15, found employment on PWA projects during the month. Pay-roll disbursements of \$9,305,000 were \$638,000 less than in May.

As a result of the beginning of work on a number of new projects, contractors on low-rent projects of the United States Housing Author-

ity were able to give employment to an additional 6,000 building-trades workers in the month ending June 15. Wage payments of \$4,955,000 to the 50,000 workers employed were \$337,000 greater than in May.

Although almost all types of projects showed employment gains in the month ending June 15, the seasonal increase on public road projects was largely responsible for a gain of 24,000 on construction projects financed from regular Federal appropriations. The 300,000 men employed on all projects financed from regular funds were paid \$31,819,000, or \$1,641,000 more than payments in the preceding month.

The number of men employed on construction projects financed by the Reconstruction Finance Corporation rose about 200 in the month ending June 15, bringing the number employed to 2,100. Pay rolls for the month were \$260,000.

Because of budgetary restrictions, employment on work relief projects of the Work Projects Administration was curtailed to 1,583,000 in June, a decrease of 255,000 from May. Wage payments of \$96,545,000 to workers on these projects were \$13,596,000 less than in May. The number of persons at work on Federal agency projects under the Work Projects Administration, however, increased 11,000 in June.

The out-of-school work program of the National Youth Administration furnished employment to 26,000 fewer persons in June and, because of the end of the school year in many colleges and universities, the number of students employed on the student-work program decreased 163,000.

With the end of an enlistment period employment in camps of the Civilian Conservation Corps dropped 36,000 in June. Of the 275,500 on the pay roll, 244,600 were enrollees; 1,500, educational advisers; 200, nurses; and 29,200, supervisory and technical employees.

In the regular services of the Federal Government increases were reported in the executive, military, and legislative services, while a decrease was reported in the judicial service. Of the 1,011,000 employees in the executive service, 134,000 were working in the District of Columbia and 877,000 outside the District. Force-account employees (employees on the pay roll of the United States Government who are engaged on construction projects, and whose period of employment terminates as the project is completed) were 9 percent of the total number of employees in the executive service.

Employment on State-financed road projects increased by 15,000 in June. Of the 190,000 on the pay roll, 56,000 were engaged in the construction of new roads and 134,000 on maintenance. Pay-roll disbursements for both types of road work were \$13,450,000.

A summary of Federal employment and pay-roll data for June is given in table 2.

TABLE 2.—Summary of Federal Employment and Pay Rolls, June and May 1940¹
(Preliminary Figures)

Class	Employment			Pay rolls		
	June	May	Per-centage change	June	May	Per-centage change
Federal services:						
Executive ²	1,011,066	977,990	+3.4	\$149,076,667	\$149,205,295	-0.1
Judicial	2,468	2,499	-1.2	585,419	604,457	-3.1
Legislative	5,886	5,851	+6	1,303,166	1,303,465	(³)
Military	473,680	464,111	+2.1	33,729,173	33,404,769	+1.0
Construction projects:						
Financed by PWA ⁴	91,609	97,621	-6.2	9,305,085	9,942,607	-6.4
USHA low-rent housing	49,743	44,390	+12.1	4,954,520	4,617,858	+7.3
Financed by RFC ⁵	2,095	1,864	+12.4	259,871	234,089	+11.0
Financed by regular Federal appropriations	299,760	276,098	+8.6	31,818,888	30,177,734	+5.4
Federal agency projects financed by Work Projects Administration	112,328	101,015	+11.2	5,142,507	4,787,293	+7.4
Projects operated by WPA	1,583,242	1,837,854	-13.9	96,545,418	110,140,815	-12.4
National Youth Administration:						
Student-work program	314,539	477,810	-34.2	2,321,283	3,438,029	-32.5
Out-of-school program	274,090	300,105	-8.7	5,558,254	5,593,894	-6
Civilian Conservation Corps	275,529	312,094	-11.7	11,980,550	14,003,437	-14.4

¹ Includes data on projects financed wholly or partially from Federal funds.

² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 124,108 employees and pay-roll disbursements of \$15,965,975 for June 1940, and 127,176 employees and pay-roll disbursements of \$17,243,929 for May 1940.

³ Less than 1/10 of 1 percent.

⁴ Data covering PWA projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 7,456 wage earners and \$716,866 pay roll for June 1940; 7,735 wage earners and \$767,603 pay roll for May 1940, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 81,254 wage earners and \$8,299,485 pay roll for June 1940; 86,968 wage earners and \$8,848,178 pay roll for May 1940, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

⁵ Includes 1,078 employees and pay-roll disbursements of \$162,325 for June 1940; 862 employees and pay-roll disbursements of \$135,048 for May 1940 on projects financed by the RFC Mortgage Co.

DETAILED REPORTS FOR MAY 1940

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of May 1940, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 90 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads.

The reports for the first 2 of these groups—manufacturing and non-manufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

The indexes of factory employment and pay rolls are based on the 3-year average 1923-25 as 100 and are adjusted to 1937 census data. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 90 manufacturing industries. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and the clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

The indexes for retail trade have been adjusted to conform in general with the 1935 census of retail distribution and are weighted by lines of trade. For the public utilities they have been adjusted to the 1937 census of electrical industries; for wholesale trade to the 1933 census; and for coal mining, year-round hotels, laundries, and dyeing and cleaning to the 1935 censuses.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings shown in table 1 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week, and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample vary slightly from month to month. Therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The

changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from May 1939 are computed from chain indexes based on the month-to-month percentage changes.

**EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND
AVERAGE EARNINGS**

The employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for March, April, and May 1940, where available, are presented in table 1. The March and April figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports.

In table 2, indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of the 13 non-manufacturing industries, by months, from May 1939 to May 1940, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to May 1940.

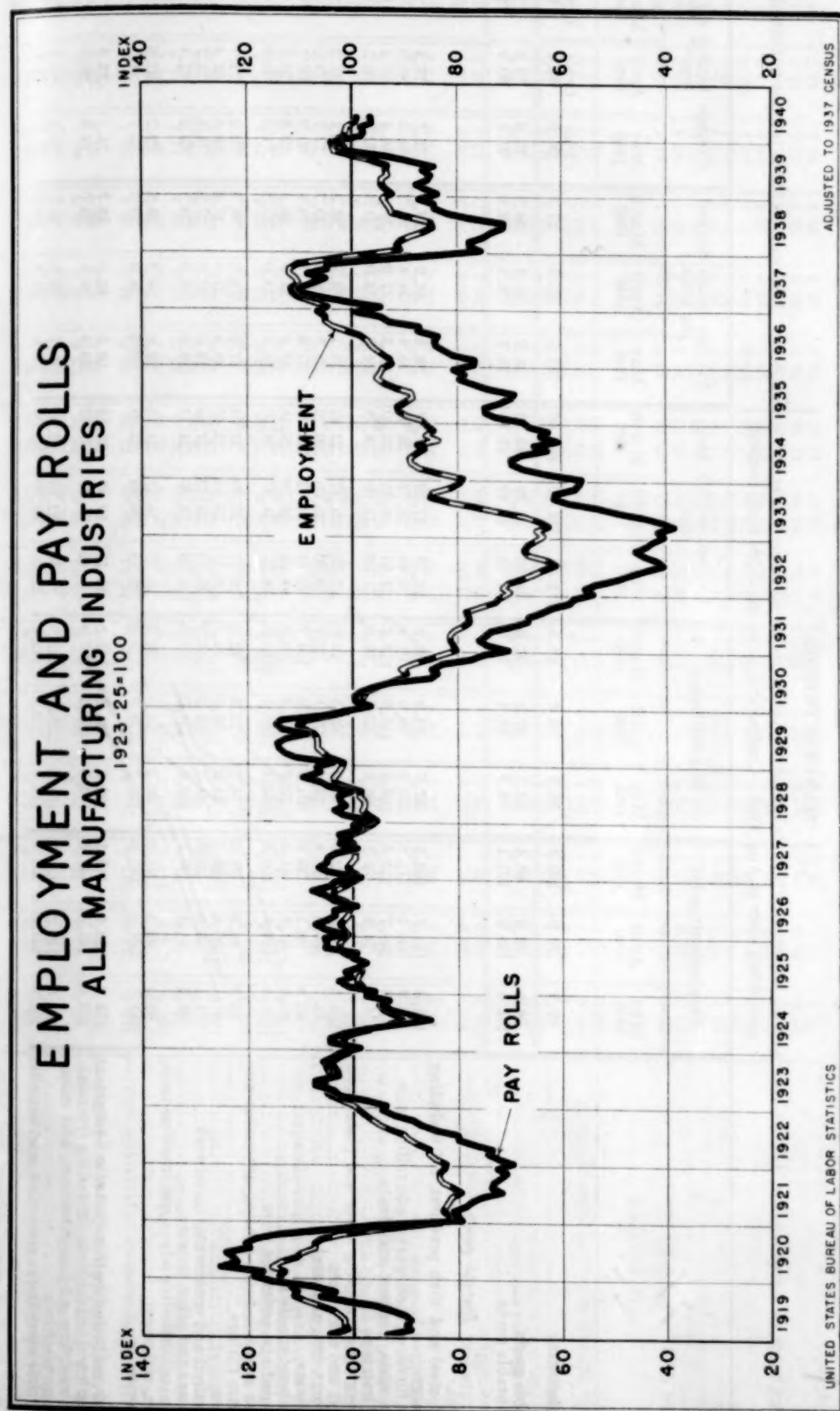


TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries

MANUFACTURING

[Indexes are based on 3-year average, 1923-25 = 100, and are adjusted to 1937 Census of Manufactures for all industries except automobiles. Not comparable to indexes published in pamphlets prior to Aug. 1939. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940
All manufacturing.....	99.0	99.6	100.8	96.2	96.3	98.2	\$25.43	\$25.33	\$25.46	37.2	37.2	37.5	Cents 66.9	Cents 66.5	Cents 66.5
Durable goods.....	96.4	96.0	96.4	97.5	97.2	97.6	28.80	28.92	28.90	38.2	38.2	38.3	72.9	72.8	72.8
Nondurable goods.....	101.4	103.0	105.1	94.9	95.4	98.0	21.72	21.49	21.86	36.3	36.2	36.9	61.5	60.9	61.0
Durable goods															
Iron and steel and their products, not including machinery.....	101.9	101.7	103.5	97.0	94.9	96.5	28.16	27.50	27.47	36.6	36.0	36.1	76.7	76.4	76.3
Blast furnaces, steel works, and rolling mills.....	108.9	108.4	111.5	102.9	98.6	101.8	29.88	28.73	28.88	35.5	34.4	34.7	84.2	83.8	83.8
Boils, nuts, washers, and rivets.....	106.8	108.7	111.5	109.3	113.9	117.3	24.94	25.31	25.40	36.5	37.0	37.2	68.4	68.4	68.3
Cast-iron pipe.....	75.8	74.5	75.1	66.8	62.2	59.8	21.00	19.96	18.98	34.6	33.0	31.4	60.3	60.1	59.9
Cutlery (not including silver and plated cutlery) and edge tools.....	102.5	103.8	102.9	92.0	93.5	90.6	23.40	23.47	22.92	38.7	38.9	38.5	61.4	61.2	60.6
Forgings, iron and steel.....	66.7	66.8	68.4	73.4	75.1	77.4	29.90	30.60	30.79	38.5	39.3	39.7	77.7	78.0	77.6
Hardware.....	93.9	98.1	98.8	101.9	104.0	104.7	26.14	26.13	26.15	37.8	38.1	38.4	60.2	68.5	68.1
Plumbers' supplies.....	81.8	81.8	81.8	72.7	72.3	70.8	25.94	25.78	25.18	37.1	36.9	36.4	69.8	70.0	69.2
Stamped and enameled ware.....	156.4	159.6	160.8	162.1	163.5	162.6	24.67	24.37	24.10	38.1	38.0	37.8	64.3	63.8	63.6
Steam and hot-water heating apparatus and steam fittings.....	85.0	84.6	85.0	74.5	75.6	75.0	26.77	27.36	27.04	37.8	38.5	38.3	70.9	71.2	70.6
Stoves.....	91.1	90.8	89.5	84.0	82.3	79.6	25.35	25.95	25.40	38.4	37.0	37.6	68.8	67.4	67.4
Structural and ornamental metalwork.....	71.1	70.0	70.3	61.7	61.2	59.5	28.13	28.42	27.39	38.0	38.6	37.3	74.1	73.7	73.5
Tin cans and other tinware.....	95.6	94.8	93.7	100.9	101.0	99.6	24.04	24.20	24.15	38.6	38.9	38.7	62.2	62.4	62.6
Tools (not including edge tools, machine tools, files, and saws).....	92.0	93.5	94.6	90.2	91.0	92.6	24.75	24.57	24.74	39.6	39.3	39.8	62.7	62.6	62.4
Wirework.....	161.1	161.5	162.5	169.7	174.8	179.9	26.18	26.89	27.51	37.2	38.0	39.1	70.7	71.1	70.6
Machinery, not including transportation equipment															
Agricultural implements (including tractors).....	113.9	113.6	113.1	122.3	121.6	121.5	30.11	29.97	30.15	40.5	40.5	40.7	74.1	73.9	73.9
Cash registers, adding machines, and calculating machines.....	139.6	141.4	143.6	164.0	166.1	167.9	31.42	31.43	31.37	39.4	39.3	39.5	79.9	80.1	79.7
Electrical machinery, apparatus, and supplies	129.0	129.0	128.2	133.5	133.9	133.9	32.58	32.75	32.94	39.7	39.9	40.1	82.4	82.4	82.4
	101.9	101.5	101.7	114.3	112.7	113.8	30.01	29.70	29.98	39.8	39.4	39.8	75.7	75.6	75.5

Engines, turbines, water wheels, and wind-mills.....	148.9	140.2	134.5	193.8	183.1	175.7	34.21	34.35	34.43	43.1	42.9	42.9	70.7	80.3	80.7
Foundry and machine-shop products.....	96.5	97.2	97.2	94.6	95.7	95.7	29.21	29.27	29.39	40.1	40.3	40.5	73.0	72.6	72.5
Machine tools.....	221.1	216.3	211.0	280.7	287.1	281.6	36.35	36.72	36.99	47.5	47.9	48.3	76.6	76.7	76.7
Radio and phonographs.....	136.5	128.3	121.7	126.9	116.0	109.5	23.09	22.46	22.30	38.2	36.8	36.4	60.6	61.1	61.4
Textile machinery and parts.....	82.2	84.9	85.8	77.0	80.1	81.9	25.71	26.01	26.23	39.6	40.1	40.3	65.1	65.0	65.2
Typewriters and parts.....	113.1	114.4	115.2	114.0	112.2	111.4	24.73	24.06	23.72	38.1	37.2	36.6	64.9	64.7	64.7
Transportation equipment.....	115.0	115.4	117.0	116.6	122.6	124.3	32.83	34.40	34.39	36.7	38.3	38.4	90.2	90.3	90.0
Aircraft.....	2,328.2	2,166.0	2,096.2	2,212.6	2,062.7	2,010.8	29.63	29.75	29.96	41.2	41.4	42.1	73.2	73.3	73.4
Automobiles.....	109.8	112.0	111.4	121.2	122.9	122.9	33.47	35.78	35.53	35.4	37.9	37.7	94.7	94.5	94.4
Cars, electric and steam-railroad.....	55.7	57.4	61.1	49.9	52.0	58.3	28.36	28.36	28.92	37.2	37.4	39.4	75.4	75.7	75.9
Locomotives.....	28.2	28.0	28.4	26.1	26.0	26.0	29.31	28.61	28.08	37.4	36.7	36.3	77.9	77.4	77.4
Shipbuilding.....	158.2	152.8	150.7	180.4	169.4	169.3	34.20	33.25	33.68	39.5	38.5	39.0	86.2	85.9	86.0
Nonferrous metals and their products.....	105.3	105.6	107.1	103.6	103.1	104.8	27.02	26.76	26.96	38.8	38.6	38.9	70.1	70.0	69.7
Aluminum manufactures.....	172.9	171.5	171.3	201.5	199.3	196.3	28.38	28.31	27.91	39.8	39.8	39.6	71.3	71.1	71.5
Brass, bronze, and copper products.....	125.5	125.8	128.7	134.2	133.0	137.2	29.00	28.74	29.01	38.8	38.6	39.0	75.0	74.9	74.8
Clocks and watches and time-recording devices.....	89.7	89.4	90.9	94.0	91.7	94.8	23.25	22.74	23.14	38.9	38.0	38.8	59.7	59.9	59.6
Jewelry.....	88.7	90.0	92.4	72.6	72.2	75.3	22.84	22.44	22.87	37.7	37.0	38.2	59.9	59.9	59.0
Lighting equipment.....	84.1	85.9	86.0	72.4	74.2	74.2	27.48	27.59	27.55	38.3	38.1	38.5	71.5	72.2	71.5
Silverware and plated ware.....	70.4	70.7	70.2	61.3	62.8	60.3	25.06	25.60	24.90	38.6	39.5	38.7	65.1	65.1	64.1
Smelting and refining—copper, lead, and zinc.....	85.5	85.9	86.7	84.3	84.4	84.8	27.71	27.59	27.44	38.9	39.0	38.8	71.2	70.8	70.7
Lumber and allied products.....	88.0	86.9	86.8	63.3	61.4	61.0	20.22	20.00	19.91	38.7	38.4	38.4	52.1	51.8	51.5
Furniture.....	87.3	86.4	88.7	74.8	74.2	77.7	20.59	20.70	21.15	38.0	38.3	39.2	54.6	54.6	54.7
Lumber.....	60.7	60.9	60.7	47.8	47.6	47.1	22.02	21.84	21.59	40.3	40.0	39.9	54.8	54.7	54.3
Millwork.....	61.9	60.3	59.5	58.3	55.4	53.3	19.43	18.93	18.49	38.7	38.1	37.6	50.3	49.7	49.2
Sawmills.....	82.0	80.5	77.7	74.7	73.2	68.3	24.79	24.49	24.03	37.1	36.5	35.7	68.4	68.4	68.4
Stone, clay, and glass products.....	60.9	58.0	54.4	49.2	45.2	41.5	20.65	19.97	19.55	37.2	36.1	35.0	55.1	55.1	55.3
Brick, tile, and terra cotta.....	70.8	67.7	59.4	69.2	63.6	54.1	27.78	26.68	25.81	39.3	38.1	36.7	70.6	70.0	70.3
Cement.....	104.4	105.3	106.2	112.0	114.2	112.8	26.18	26.49	26.02	35.6	36.0	35.2	73.9	73.9	74.1
Glass.....	49.0	45.6	42.9	39.1	34.6	29.6	27.93	26.68	24.24	38.6	36.9	34.3	73.2	73.0	70.8
Marble, granite, slate, and other products.....	90.6	93.0	93.1	84.2	85.1	85.3	23.64	23.28	23.26	37.5	37.1	37.6	63.8	63.9	63.7
Pottery.....	95.9	98.8	102.9	77.9	81.4	89.5	16.52	16.74	17.45	33.7	34.2	35.1	49.6	49.5	50.5
Textiles and their products*.....	87.0	88.3	90.7	73.9	75.2	78.5	16.35	16.40	16.62	34.3	34.5	35.1	48.4	48.2	48.2
Fabrics.....	75.7	79.5	80.1	59.9	67.8	67.4	21.91	23.61	23.30	32.7	33.5	35.2	67.0	66.6	66.3
Carpets and rugs.....	88.8	90.8	92.1	78.1	80.6	82.8	14.24	14.39	14.59	34.5	35.0	35.6	41.2	41.0	41.0
Cotton goods.....	76.0	79.0	81.1	68.2	73.4	75.5	17.38	18.05	18.17	35.9	37.4	38.0	48.6	48.0	48.8
Cotton small wares.....	122.6	125.4	123.1	98.9	104.7	108.7	20.28	20.62	20.62	35.6	36.5	37.5	54.9	55.0	54.6
Dyeing and finishing textiles.....	66.2	65.4	66.5	46.2	38.8	68.6	18.98	16.18	18.60	26.3	22.2	29.3	72.0	71.8	71.4
Hats, fur-felt.....	133.7	140.1	140.1	133.6	144.2	145.7	17.81	16.46	18.60	32.5	33.2	34.0	56.2	56.0	55.5
Hosiery.....	61.6	60.0	65.3	49.9	47.2	53.0	17.30	16.79	17.28	36.0	34.9	35.7	47.5	47.6	47.7
Knitted underwear.....	73.5	77.1	78.6	64.6	68.2	71.7	14.82	14.87	15.37	34.3	35.2	36.6	43.3	42.3	42.3

See footnotes at end of table.

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940
<i>Nonferrous goods—Continued</i>															
<i>Textiles and their products—Continued.</i>															
<i>Fabrics—Continued.</i>															
Knitted cloth.....	127.4	130.5	134.5	103.5	101.4	107.2	\$18.26	\$17.46	\$17.86	36.3	34.5	36.4	48.9	49.0	47.8
Silk and rayon goods.....	62.1	64.4	66.2	48.6	50.3	52.2	16.15	16.16	16.25	35.1	35.2	35.5	45.7	45.6	45.4
Woolen and worsted goods.....	71.8	66.7	71.4	60.3	53.2	57.2	19.38	18.35	18.42	34.5	32.5	32.6	56.3	56.5	56.7
Wearing apparel.....	112.0	118.6	126.6	81.0	88.7	105.7	16.97	17.63	19.54	32.7	33.6	35.2	51.8	51.9	54.3
Clothing, men's.....	95.0	103.5	111.9	64.5	72.0	88.3	17.56	18.09	20.43	30.9	31.6	34.3	57.3	57.4	58.8
Clothing, women's.....	162.5	168.1	181.2	112.4	118.7	141.6	18.58	19.04	21.07	33.8	34.3	35.1	51.1	51.8	55.7
Corsets and allied garments.....	114.4	115.4	116.1	116.5	120.2	119.7	16.82	17.20	16.99	35.5	36.0	36.0	46.6	46.8	46.4
Men's furnishings.....	115.0	117.8	124.3	96.2	101.0	116.5	13.05	13.34	14.54	32.4	33.5	35.3	39.8	39.5	40.1
Millinery.....	74.6	87.3	96.8	54.1	73.8	103.2	20.81	24.28	30.59	32.3	35.0	39.5	66.3	67.2	70.9
Shirts and collars.....	121.2	125.2	125.8	101.2	111.2	113.0	13.30	14.14	14.34	33.4	35.3	36.0	40.5	40.4	40.3
<i>Leather and its manufactures</i>															
Boots and shoes.....	86.9	94.2	96.2	63.6	70.7	80.3	17.36	17.68	19.23	30.9	32.5	35.6	55.5	54.3	54.1
Leather.....	84.6	93.1	97.7	58.1	66.6	78.2	15.65	16.30	18.20	29.5	31.5	35.2	53.3	52.1	51.9
Leather.....	80.6	82.7	84.0	76.7	78.2	80.4	23.74	23.63	23.83	37.0	36.9	37.3	64.2	64.2	63.8
<i>Food and kindred products</i>															
Baking.....	121.6	119.7	118.8	121.4	117.7	117.1	25.64	25.17	25.25	40.1	39.4	39.8	64.7	64.3	64.1
Beverages.....	144.7	142.5	143.1	137.8	134.3	134.4	26.52	26.22	26.12	41.7	41.4	41.6	63.9	63.6	63.0
Butter.....	278.5	268.4	261.6	330.4	300.1	300.1	34.77	34.00	33.93	39.9	39.0	38.4	88.3	88.0	88.2
Canning and preserving.....	99.9	93.7	90.0	84.8	80.6	77.7	22.50	22.92	22.97	46.8	46.8	46.6	47.9	48.7	48.9
Confectionery.....	99.9	103.4	88.1	89.0	83.2	76.2	17.40	15.64	16.88	34.6	31.6	34.8	51.0	50.5	49.5
Flour.....	76.1	77.0	81.9	75.4	74.0	77.4	19.46	18.83	18.47	37.9	36.8	36.8	51.5	51.1	50.2
Ice cream.....	83.8	75.0	79.4	70.1	63.1	73.3	25.17	24.79	25.01	41.1	40.6	40.7	61.1	60.8	61.1
Slaughtering and meat packing.....	105.7	103.6	107.4	110.4	109.5	111.5	29.13	29.30	29.68	46.2	45.6	45.4	63.0	63.5	64.8
Sugar, beet.....	47.4	44.1	39.6	49.3	48.2	45.3	27.04	27.76	27.26	39.9	40.3	40.0	68.8	68.9	68.1
Sugar refining, cane.....	95.2	94.0	95.7	80.0	77.0	78.9	23.64	23.05	23.18	37.1	36.5	36.6	63.6	63.1	63.4
<i>Tobacco manufactures</i>															
Chewing and smoking tobacco and snuff.....	62.2	63.8	63.6	60.7	58.7	58.1	18.02	17.07	16.88	36.4	34.7	34.5	49.7	49.3	49.0
Cigars and cigarettes.....	58.6	58.5	60.5	60.5	64.2	63.9	18.47	17.78	17.90	34.7	33.5	34.3	53.4	53.1	52.3
Cigars and cigarettes.....	62.6	64.3	63.9	59.9	58.0	56.9	17.92	16.91	16.64	36.6	34.8	34.6	49.3	48.8	48.5

Paper and printing	115.0	113.9	114.4	113.1	109.7	110.0	39.38	28.70	38.8	38.1	38.0	79.4	79.3	78.9
Boxes, paper.....	114.0	113.0	114.2	124.6	120.7	121.6	21.72	21.25	38.7	37.9	38.1	56.3	56.2	55.8
Paper and pulp.....	115.2	112.0	112.6	124.2	115.4	115.1	26.52	25.35	41.6	39.9	39.5	63.8	63.7	63.7
Printing and publishing:														
Book and job.....	99.3	99.5	99.8	88.4	87.4	88.2	31.11	30.73	38.7	38.2	38.4	82.1	81.6	81.7
Newspapers and periodicals.....	117.1	116.5	117.0	112.3	110.9	110.9	38.56	38.27	36.2	36.2	36.0	103.5	102.9	102.3
Chemical, petroleum, and coal products														
Petroleum refining.....	120.9	123.4	122.8	133.7	133.4	132.5	29.73	28.99	39.14	38.5	38.4	76.0	74.2	74.6
Other than petroleum refining.....	121.8	121.1	121.3	136.8	136.9	135.8	35.14	35.34	34.96	36.5	36.2	97.5	97.4	97.1
Chemicals.....	120.7	123.1	123.1	132.3	132.3	131.5	27.47	26.51	36.8	39.2	39.2	68.6	66.5	67.0
Cottonseed—oil, cake, and meal.....	136.1	135.2	135.6	161.9	159.6	159.3	32.08	31.83	39.9	39.8	39.7	80.2	80.1	80.1
Druggists' preparations.....	67.8	79.2	89.5	60.1	68.8	80.5	14.12	13.86	14.37	39.9	41.4	34.3	32.8	33.1
Explosives.....	118.9	118.7	118.7	129.3	130.5	131.2	24.62	24.88	25.09	39.1	40.0	60.6	60.5	60.3
Fertilizers.....	118.0	114.0	107.8	141.2	133.1	128.8	32.80	31.99	32.80	38.4	39.1	82.5	83.3	83.9
Paints and varnishes.....	129.1	124.4	123.5	136.3	131.9	130.5	29.62	29.02	28.93	41.4	40.6	43.2	37.9	38.4
Rayon and allied products.....	304.3	305.8	309.0	311.4	311.1	316.0	26.27	26.12	28.26	39.1	39.1	71.6	67.2	67.2
Soap.....	81.4	81.2	82.7	98.0	98.0	99.5	28.19	28.27	28.98	39.4	39.2	71.4	71.7	71.7
Rubber products														
Rubber boots and shoes.....	84.0	84.7	87.2	87.2	86.5	88.3	28.39	27.98	37.66	36.0	35.8	77.8	77.9	77.9
Rubber tires and inner tubes.....	69.0	69.7	72.3	79.9	78.1	55.8	22.85	22.66	22.90	37.0	37.2	61.6	61.3	61.6
Rubber goods, other.....	140.4	139.7	144.2	131.5	132.6	137.5	33.88	32.77	31.98	34.1	33.5	96.8	96.9	96.3

NONMANUFACTURING

(Indexes are based on 12-month average, 1929=100)

Coal mining:	52.2	51.6	52.6	40.0	36.3	38.4	\$25.20	\$23.11	\$24.03	27.9	26.2	26.3	91.6	90.6	91.7
Anthracite.....	84.9	82.2	89.7	75.8	72.2	78.3	24.14	22.63	23.57	27.6	25.6	26.5	88.1	88.0	88.4
Bituminous.....	69.2	67.7	66.2	65.9	63.5	63.2	29.73	29.30	29.88	40.9	40.4	41.2	73.0	72.8	73.0
Quarrying and nonmetallic mining.....	47.1	44.5	41.0	42.9	38.1	34.1	22.76	21.33	20.67	40.6	38.4	36.9	55.8	55.6	56.0
Crude-petroleum production.....	63.1	63.1	63.2	59.0	59.0	53.4	34.22	34.20	34.02	38.4	38.2	37.8	87.6	87.9	88.4
Public utilities:															
Telephone and telegraph.....	77.3	76.7	76.0	98.5	98.7	98.1	31.27	31.58	31.73	39.2	39.3	39.4	80.2	80.9	81.1
Electric light and power.....	90.6	90.0	89.3	104.5	103.3	102.3	35.18	34.98	34.96	39.9	39.9	39.9	87.8	87.8	87.6
Street railways and busses.....	68.4	68.3	68.2	69.3	69.2	69.5	33.42	33.37	33.60	46.0	46.0	46.3	71.8	71.7	71.8
Trade:															
Wholesale.....	88.7	89.3	90.5	77.2	77.4	77.8	30.49	30.33	30.08	41.3	41.3	41.2	74.0	73.7	73.1
Retail.....	91.2	89.8	91.1	83.4	82.3	82.0	21.42	21.46	21.02	42.8	42.9	42.6	54.6	54.6	54.0
Food.....	103.9	103.1	103.8	94.7	94.3	94.4	23.48	23.33	23.43	43.1	43.2	43.3	52.3	52.3	52.3
General merchandising.....	95.5	92.9	96.4	86.8	85.0	85.9	17.96	18.02	17.62	38.4	38.8	38.4	46.3	46.3	45.7
Apparel.....	86.3	85.2	92.6	78.1	77.0	79.3	21.25	21.25	19.89	38.3	38.5	36.5	55.0	54.7	53.8
Furniture.....	78.4	78.1	76.6	71.3	68.7	66.3	29.35	28.58	28.00	44.4	44.2	44.3	69.3	68.4	65.4
Automotive.....	86.2	84.7	82.5	82.9	81.8	78.0	28.54	28.08	28.33	47.6	47.8	47.8	59.8	59.9	59.0
Lumber.....	74.5	72.4	70.4	71.0	68.0	65.7	26.73	26.32	26.06	43.2	42.6	42.3	62.8	63.1	63.0

See footnotes at end of table.

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued

NONMANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940	May 1940	April 1940	March 1940
Hotels (year-round) ²	93.4	92.7	92.0	83.1	83.2	81.8	\$15.45	\$15.60	\$15.44	46.1	46.6	46.2	33.0	33.0	32.9
Laundries ³	99.1	97.2	96.2	88.5	85.6	84.1	18.29	18.03	17.87	43.4	43.0	43.0	42.2	42.0	41.7
Dyeing and cleaning ⁴	108.7	104.5	99.5	85.5	79.6	72.7	21.67	20.99	20.10	44.8	43.5	42.4	49.4	49.4	48.8
Brokerage ⁵	+4	+2	-1.0	-0.6	+3.5	-2.4	37.37	37.74	36.95	(16)	(16)	(16)	(16)	(16)	(16)
Insurance ⁶	+3	+3	+2	+2	+1	+1.6	36.87	36.90	36.79	(16)	(16)	(16)	(16)	(16)	(16)
Building construction ⁷	+13.6	+11.7	+3.0	+19.5	+13.3	+6.3	31.99	30.32	29.89	33.5	31.7	30.9	95.5	95.8	97.0

² Revised series of employment and pay-roll indexes. Figures for earlier months available on request.

³ Revised series. Mimeographed sheets, giving averages by years, 1932 to 1938, inclusive, and by months, January 1938 to September 1939, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

⁴ Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of pamphlet.

⁵ Average hourly earnings not comparable to those previously published because of change in reporting sample. Comparable February hourly earnings are 56.5 cents.

⁶ Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁷ Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940.

⁸ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

⁹ Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet.

¹⁰ Cash payments only; additional value of board, room, and tips not included.

¹¹ Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

¹² Not available.

TABLE 2.—Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Non-manufacturing² Industries, May 1939 to May 1940, Inclusive

Industry	Employment														
	1939										1940				
	Av.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	
Manufacturing															
All industries.....	96.8	93.0	93.4	93.5	96.3	100.2	103.6	103.8	104.1	101.4	101.4	100.8	99.6	99.0	
Durable goods ³	87.8	84.0	84.6	83.0	83.9	89.8	96.1	98.2	100.0	97.4	96.6	96.4	96.0	96.4	
Nondurable goods ⁴	105.5	101.6	101.8	103.5	108.1	110.2	110.8	109.2	108.0	105.3	106.1	105.1	103.0	101.4	
Nonmanufacturing															
Anthracite mining ⁵	50.6	52.6	51.2	44.7	48.5	49.4	51.9	51.3	51.0	51.5	52.0	52.6	51.6	52.2	
Bituminous-coal mining ⁵	78.6	47.9	78.3	79.4	81.4	85.4	93.0	94.9	92.6	91.8	91.7	89.7	86.2	84.9	
Metalliferous mining.....	62.7	61.9	61.6	60.4	60.4	62.9	65.3	66.5	67.3	66.4	66.3	66.2	67.7	69.2	
Quarrying and nonmetallic mining.....	44.6	45.6	47.3	47.5	48.1	47.9	48.0	47.1	44.0	37.8	38.3	41.0	44.5	47.1	
Crude-petroleum production.....	65.8	66.1	67.0	67.3	66.7	65.0	64.3	63.8	63.8	63.2	63.0	63.2	63.1	63.1	
Telephone and telegraph ⁶	75.8	75.8	76.4	76.5	76.6	76.4	76.5	76.1	75.8	76.1	75.9	76.0	76.7	77.3	
Electric light and power ⁶	89.0	88.2	89.2	90.0	90.6	90.6	90.4	90.3	90.1	89.1	89.2	89.3	90.0	90.6	
Street railways and busses ⁷	69.0	68.9	69.3	69.1	69.2	69.2	69.5	69.3	69.0	68.8	68.7	68.2	68.3	68.4	
Wholesale trade.....	89.2	87.2	88.1	87.9	89.0	90.5	92.4	92.1	92.2	90.6	90.2	90.5	89.3	88.7	
Retail trade ⁶	89.8	88.8	89.4	87.2	86.3	90.5	91.7	93.3	104.2	87.7	87.0	91.1	89.8	91.2	
Year-round hotels ⁸	92.0	93.9	92.8	90.3	89.8	91.3	92.9	91.8	90.8	91.3	92.1	92.0	92.7	93.4	
Laundries ⁹	95.9	95.5	98.7	100.0	99.1	97.8	96.0	95.6	95.6	96.0	95.8	96.2	97.2	99.1	
Dyeing and cleaning ⁹	101.3	107.0	110.1	106.5	102.7	105.2	105.1	97.8	97.4	94.0	93.7	99.5	104.5	108.7	
Pay rolls															
Manufacturing															
All industries.....	90.8	85.0	86.5	84.4	89.7	93.8	101.6	101.6	103.7	98.3	97.8	98.2	96.3	96.2	
Durable goods ³	85.2	78.8	80.7	76.0	81.5	87.8	99.6	100.9	104.6	98.2	96.7	97.6	97.2	97.5	
Nondurable goods ⁴	97.0	91.9	93.0	93.7	99.0	100.5	103.9	102.4	102.8	98.4	99.1	99.0	95.4	94.9	
Nonmanufacturing															
Anthracite mining ⁵	39.5	57.0	36.1	25.2	33.8	40.1	52.2	42.0	26.6	52.5	32.9	38.4	36.3	40.0	
Bituminous-coal mining ⁵	69.9	20.4	66.5	64.5	74.6	80.2	97.6	96.3	84.3	87.0	87.0	78.3	72.2	75.8	
Metalliferous mining.....	56.0	54.1	53.8	48.5	53.0	55.1	63.4	63.9	65.0	63.6	64.2	63.2	63.5	65.9	
Quarrying and nonmetallic mining.....	38.7	39.7	41.7	40.9	42.9	42.7	45.6	42.9	39.2	29.6	30.8	34.1	38.1	42.9	
Crude-petroleum production.....	61.0	61.2	62.5	61.9	62.0	60.8	58.8	59.6	59.2	58.4	59.0	58.4	59.0	59.0	
Telephone and telegraph ⁶	95.6	95.7	95.7	96.6	96.3	96.9	97.2	96.4	97.4	96.9	98.1	98.7	98.5	98.5	
Electric light and power ⁶	100.4	99.9	101.2	101.1	102.2	102.2	102.0	102.5	102.4	101.6	102.2	102.3	103.3	104.5	
Street railways and busses ⁷	69.5	68.9	70.0	69.4	69.8	69.2	71.2	69.4	69.8	69.0	71.5	69.5	69.2	69.3	
Wholesale trade.....	76.6	74.9	75.8	75.8	76.2	78.0	80.3	79.0	79.1	77.1	77.1	77.8	77.4	77.2	
Retail trade ⁶	80.8	79.9	81.1	79.5	78.0	80.9	83.2	83.6	91.8	79.9	79.1	82.0	82.3	83.4	
Year-round hotels ⁸	81.2	82.4	82.0	79.1	79.2	80.4	82.2	81.8	81.1	81.1	82.7	81.8	83.2	83.1	
Laundries ⁹	83.1	83.9	86.9	88.0	85.9	84.5	83.9	82.9	83.7	83.4	83.1	84.1	85.6	88.5	
Dyeing and cleaning ⁹	73.6	83.0	84.2	77.1	73.0	78.3	77.3	70.8	69.9	65.5	64.4	72.7	79.6	85.5	

¹ 3-year average 1923-25=100—adjusted to 1937 Census of Manufactures.² 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude petroleum production are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review. For other nonmanufacturing indexes see notes 5 and 6.³ Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.⁴ Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.⁵ Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of pamphlet.⁶ Retail trade indexes adjusted to 1935 census and public utility indexes to 1937 census. Not comparable with indexes published in pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.⁷ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

The publication of unweighted percentage changes in employment and pay rolls by States and geographic division has been discontinued. A mimeographed table showing these data will, however, be made available on request. Estimates of the total number of employees in nonagricultural establishments for June 1940 will be shown in next month's issue of this pamphlet. Similar figures for individual states, by months, from January 1938 to May 1940, are available in mimeographed form.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in April and May 1940 is made in table 3 for 13 metropolitan areas, each of which had a population of 500,000 or over in 1930. Cities within these areas but having a population of 100,000 or over, are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 1, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 Census of Population.

TABLE 3.—*Comparison of Employment and Pay Rolls in Identical Establishments in April and May 1940, by Principal Metropolitan Areas*

Metropolitan area	Number of establishments, May 1940	Number on pay roll, May 1940	Percentage change from April 1940	Amount of pay roll (1 week), May 1940	Percentage change from April 1940
New York ¹	13,985	686,658	-0.3	\$19,499,956	+0.1
Chicago ²	4,338	449,482	+ .8	12,707,099	+1.7
Philadelphia ³	2,408	217,147	-1.1	6,044,029	- .9
Detroit	1,640	351,151	-2.0	11,612,365	-6.9
Los Angeles ⁴	3,030	184,660	+1.9	5,515,835	+2.2
Cleveland	1,635	129,552	- .4	3,784,001	+ .8
St. Louis	1,397	121,364	-2.0	3,037,696	-2.1
Baltimore	1,141	117,233	+ .8	3,035,999	+1.2
Boston ⁵	2,732	179,538	- .9	4,536,775	- .5
Pittsburgh	1,274	194,083	+ .8	5,677,756	+2.0
San Francisco ⁶	1,632	83,146	- .4	2,584,400	+ .2
Buffalo	781	74,239	+1.8	2,068,845	+2.9
Milwaukee	968	105,483	- .6	3,075,768	+ .7

¹ Does not include Elizabeth, Jersey City, Newark, nor Paterson, N. J., nor Yonkers, N. Y.

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Does not include Cambridge, Lynn, or Somerville, Mass.

⁶ Does not include Oakland, Calif.

Building Operations

RESIDENTIAL CONSTRUCTION IN THE FIRST QUARTER OF 1940

By HERMAN B. BYER and SIDNEY JAFFE, *Bureau of Labor Statistics*

Summary

ESTIMATES based upon building permit reports indicate that approximately 100,000 new dwelling units were provided for families in nonfarm areas during the first quarter of 1940. This represents an increase of 5 percent over the corresponding period of 1939 and continues the upward trend of residential building construction in recent years. The 465,000 new dwelling units provided last year made 1939 the year of greatest residential construction activity since 1929.

The permit valuation of the 100,000 new homes is estimated at \$335,000,000. This includes \$32,000,000 of public funds allocated for construction of low-rent housing projects under the supervision of the United States Housing Authority.

Projects financed with United States Housing Authority funds accounted for 10 percent of all new dwelling units in the first 3 months of 1940. Similar projects during the corresponding period of 1939 provided homes for less than half as many families.

Privately financed construction alone showed a slight decrease in the number of new dwelling units as compared with the corresponding period of 1939. This decrease is attributable to the fall in applications filed for new apartment houses in New York City. Private construction in the remainder of the country, New York City excluded, showed a 4-percent increase.

Scope of Report

The "nonfarm area" of the United States consists of areas defined as either urban or rural nonfarm. Urban communities are incorporated places with a 1930 population of 2,500 or more. There is also a small group of towns specially classified as urban. The rural nonfarm area includes all incorporated places of less than 2,500 population in addition to all unincorporated areas, excluding farms.

The figures presented in this article are estimates based upon a large sample of building-permit reports. The Bureau of Labor Statistics began collecting such data as early as 1920, at first including only the larger cities. The coverage of the sample has since then been steadily extended until it now includes more than 2,000 cities of 1,000 population or over. The aggregate population of the reporting cities is approximately 61,000,000. In addition to this sample of cities, the Bureau receives building-permit reports covering the unincorporated areas of a small number of counties. The fact that no reports at all are available regarding construction on farms explains the restriction of the present estimates to nonfarm areas.

The estimates for the first quarter of 1940 are the first of a series of nonfarm estimates to be published every 3 months by the Bureau of Labor Statistics. Previous quarterly estimates have been limited to urban areas. The annual estimates of the Bureau for the years 1936 onward are a continuation of the series established by the National Bureau of Economic Research.¹

New Dwellings, 1920-39

The high point of residential building construction during the 1930's was reached in 1939, when 465,000 new dwelling units were provided for nonfarm families. This is a third more than was provided in 1938 and more than eight times the number of new homes in 1933, the lowest point of the residential construction depression. Though the gains in recent years are impressive when viewed against the depression background, the level of residential construction is still far below that of the 1920's. During the decade from 1920 to 1929 more than 700,000 new dwelling units, on the average, were provided annually, compared with an average of 220,000 for the succeeding 10-year period. Even in the best year since 1929 residential building construction was a third below the average for the preceding decade. The wide range in number of new dwelling units provided in nonfarm areas, 1920 to 1939, is shown in table 1.

The upward building trend in 1935 continued into 1940. All population groups except those with more than 500,000 inhabitants showed increases over the same period in 1939. The most important increase was in cities having a population between 100,000 and 500,000. Homes provided in this group comprised one-sixth of the total. They were fewer in number, however, than those provided in rural nonfarm areas or in cities of population greater than 500,000.

¹ National Bureau of Economic Research, Bull. No. 65: Nonfarm Residential Construction, 1920-36. Washington, 1937.

TABLE 1.—*New Dwelling Units in Nonfarm Areas, 1920-39*¹

Year	Total non-farm	Urban	Rural non-farm	Year	Total non-farm	Urban	Rural non-farm
1920.....	247,000	196,000	51,000	1930.....	286,000	224,000	62,000
1921.....	449,000	359,000	90,000	1931.....	212,000	164,000	48,000
1922.....	716,000	574,000	142,000	1932.....	74,000	56,000	18,000
1923.....	871,000	698,000	173,000	1933.....	54,000	40,000	14,000
1924.....	893,000	716,000	177,000	1934.....	55,000	41,000	14,000
1925.....	937,000	752,000	185,000	1935.....	144,000	106,000	38,000
1926.....	849,000	681,000	168,000	1936.....	276,000	199,000	77,000
1927.....	810,000	643,000	167,000	1937.....	286,000	205,000	81,000
1928.....	753,000	594,000	159,000	1938.....	347,000	246,000	101,000
1929.....	509,000	400,000	109,000	1939.....	465,000	342,000	123,000

¹ 1920-35, National Bureau of Economic Research; 1936-39, Bureau of Labor Statistics.

The 5-percent increase over the corresponding period of 1939 was not uniformly distributed over the various types of dwellings. Increases of 12 and 23 percent, respectively, were shown in the 1- and 2-family classifications. New apartment units, on the other hand, dropped 20 percent. The major part of this decrease can be attributed to the fact that privately built apartment houses in New York City contained 4,400 fewer units.

The estimated number of new dwelling units provided in each population group during the first quarters of 1940 and 1939 are given in table 2.

TABLE 2.—*New Dwelling Units in Nonfarm Areas, First 3 Months of 1939 and 1940, by Population Group and Type of Dwelling*

Population group	All types		1-family dwellings		2-family dwellings ¹		Multifamily dwellings ²	
	First 3 months of—							
	1940	1939	1940	1939	1940	1939	1940	1939
500,000 and over.....	23, 270	27, 402	10, 350	10, 436	1, 471	780	11, 449	16, 186
100,000 and under 500,000.....	16, 632	13, 586	11, 405	9, 278	1, 307	1, 372	3, 920	2, 936
50,000 and under 100,000.....	5, 889	5, 345	4, 642	4, 342	640	372	607	631
25,000 and under 50,000.....	6, 326	5, 072	5, 060	4, 089	594	311	672	672
10,000 and under 25,000.....	9, 446	8, 662	8, 250	7, 460	438	462	758	740
5,000 and under 10,000.....	6, 553	6, 212	5, 855	5, 241	326	292	372	679
2,500 and under 5,000.....	4, 907	4, 835	4, 484	4, 363	221	226	202	246
Total urban.....	73, 023	71, 114	50, 046	45, 209	4, 997	3, 815	17, 980	22, 090
Rural nonfarm.....	26, 804	24, 240	25, 053	21, 748	826	908	925	1, 584
Total nonfarm.....	99, 827	95, 354	75, 099	66, 957	5, 823	4, 723	18, 905	23, 674
Percentage change from first 3 months of 1939.....	+4. 7	-----	+12. 2	-----	+23. 3	-----	-20. 1	-----

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

With six geographic divisions showing increases in the number of dwelling units provided in the first 3 months of 1940 as compared with the same period last year, the largest gains were made in the West South Central, South Atlantic, and Pacific States. The New England

States showed the largest percentage gain, but provided the smallest number of new homes. The only important loss occurred in the Middle Atlantic States and was caused by the decrease in New York City.

The Pacific Coast States, with 21,586, led all other divisions in the number of new homes. Next in order of importance were the Middle Atlantic and South Atlantic States. These divisions also led in the same order for new, privately financed, dwelling units alone.

Of the 100,000 new dwelling units in nonfarm areas in the first quarter of 1940, 75 percent were in 1-family dwellings, 6 percent in 2-family dwellings, and 19 percent in apartments. These proportions are by no means uniform in the several geographic divisions. In the Middle Atlantic States 52 percent of the new units were in apartment houses, as compared with less than 5 percent in the East North Central and East South Central States. The South Atlantic States were the most important in the 2-family classification. Eleven percent of all new homes in this region came in this category. The distribution of new dwelling units by type of dwelling is shown in table 3 for all geographic divisions.

TABLE 3.—*New Dwelling Units in Nonfarm Areas, First 3 Months of 1939 and 1940, by Geographic Division and Type of Dwelling*

Geographic division	All types		1-family dwellings		2-family dwellings ¹		Multifamily dwellings ²	
	First 3 months of—							
	1940	1939	1940	1939	1940	1939	1940	1939
New England.....	3,328	1,861	2,427	1,589	226	98	675	174
Middle Atlantic.....	19,524	23,817	8,549	8,747	764	493	10,211	14,577
East North Central.....	11,334	11,943	10,389	9,731	531	339	414	1,873
West North Central.....	4,529	4,732	4,022	3,634	141	192	366	906
South Atlantic.....	17,438	14,945	13,851	11,862	1,845	966	1,742	2,117
East South Central.....	4,759	4,584	4,188	3,422	429	953	142	209
West South Central.....	13,301	10,644	10,212	9,333	664	590	2,425	721
Mountain.....	4,028	2,828	3,399	2,417	192	130	437	281
Pacific.....	21,586	20,000	18,062	16,222	1,031	962	2,493	2,816
Total United States.....	99,827	95,354	75,099	66,957	5,823	4,723	18,905	23,674
Percentage change from first 3 months of 1939.....	+4.7	-----	+12.2	-----	+23.3	-----	-20.1	-----

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

New Housing by Source of Funds

Beginning with the second quarter of 1939, projects sponsored by the United States Housing Authority became an important part of the total. They comprised 10 percent of all new dwelling units in the first 3 months of 1940. Including this most recent period, the total number of low-rent homes thus publicly financed is nearly 74,000.

Public housing is often thought of as being limited to apartment construction. That this is not true is illustrated by the data for the first

quarter of 1940. Of the 10,415 units in United States Housing Authority projects, 4,943 were in 1-family dwellings, 1,384 in 2-family dwellings, and only 4,088 in apartments.

Dwelling units included in United States Housing Authority projects are relatively more important in the larger cities than in the smaller ones. In the first 3 months of 1940 these projects made up 19 percent of all new dwelling units in cities of more than 100,000 population. In all other population groups they formed only 5 percent of the total. During the early stages of the public housing program interest was almost entirely limited to the larger cities. As the program developed, smaller communities received a greater proportion of the public funds allotted for housing.

The extent to which the various population groups took advantage of the USHA program during the first quarters of 1940 and 1939 can be seen in table 4.

TABLE 4.—*New Dwelling Units in Nonfarm Areas, First 3 Months of 1939 and 1940 by Source of Funds and Population Group*

Population group	Total		Source of funds			
			Private		USHA	
	First 3 months of—					
	1940	1939	1940	1939	1940	1939
500,000 and over.....	23, 270	27, 402	21, 196	27, 081	2, 074	321
100,000 and under 500,000.....	16, 632	13, 586	11, 278	9, 974	5, 354	3, 612
50,000 and under 100,000.....	5, 889	5, 345	4, 748	4, 462	1, 141	883
25,000 and under 50,000.....	6, 326	5, 072	5, 596	5, 072	730	0
10,000 and under 25,000.....	9, 446	8, 662	9, 038	8, 662	408	0
5,000 and under 10,000.....	6, 553	6, 212	6, 349	6, 212	204	0
2,500 and under 5,000.....	4, 907	4, 835	4, 907	4, 835	0	0
Total urban.....	73, 023	71, 114	63, 112	66, 298	9, 911	4, 816
Rural nonfarm.....	26, 804	24, 240	26, 300	24, 240	504	0
Total nonfarm.....	99, 827	95, 354	89, 412	90, 538	10, 415	4, 816
Percentage change from first 3 months of 1939.....	+4. 7	-----	-1. 2	-----	+116. 3	-----

Privately financed construction in the Pacific, Mountain, and South Atlantic States made the most important gains in the first quarter of 1940 as compared with the corresponding period of 1939. The West South Central States, mentioned previously as having the largest gain in total construction, showed a small decrease when publicly financed units were excluded.

The West South Central and South Atlantic States together accounted for more than half of the new publicly financed housing in the first quarter of 1940. New Orleans, with 3 new projects containing accommodations for 2,498 families, exceeded all other cities. The largest single project, however, was the East River development in New York City, with 1,170 apartments.

The estimated number of new dwelling units provided in nonfarm areas of the United States during the first 3 months of 1940 and 1939 by private and public funds is shown in table 5 by geographic division.

TABLE 5.—*New Dwelling Units in Nonfarm Areas, First 3 Months of 1939 and 1940 by Source of Funds and Geographic Division*

Geographic division	Total		Source of funds			
			Private		USHA	
	First 3 months of—					
	1940	1939	1940	1939	1940	1939
New England.....	3, 328	1, 861	2, 361	1, 861	967	0
Middle Atlantic.....	19, 524	23, 817	17, 830	22, 043	1, 694	1, 774
East North Central.....	11, 334	11, 943	10, 753	10, 593	581	1, 350
West North Central.....	4, 529	4, 732	4, 257	4, 732	272	0
South Atlantic.....	17, 438	14, 945	15, 042	14, 125	2, 396	820
East South Central.....	4, 759	4, 584	4, 210	3, 798	549	786
West South Central.....	13, 301	10, 644	10, 074	10, 558	3, 227	86
Mountain.....	4, 028	2, 828	3, 803	2, 828	225	0
Pacific.....	21, 586	20, 000	21, 082	20, 000	504	0
Total United States.....	99, 827	95, 354	89, 412	90, 538	10, 415	4, 816
Percentage change from first 3 months of 1939.....	+4.7	-----	-1.2	-----	+116.3	-----

Estimated Permit Valuations

The permit valuation of the 100,000 new dwelling units provided in nonfarm areas during the first quarter of 1940 is estimated at approximately \$335,000,000. Of this, 78 percent was for 1-family, 4 percent for 2-family, and 18 percent for multifamily dwellings.

New housekeeping structures in the Middle Atlantic States had a permit valuation of nearly \$80,000,000. The Pacific coast division, which led in the number of new dwelling units, had the second largest permit valuation, \$66,000,000.

Permit valuations commonly understate actual costs of construction. Studies of the relationship between permit valuations and construction costs are at present being conducted by the Bureau of Labor Statistics. Preliminary results for a small number of cities indicate that construction costs of privately financed 1-family houses are, on the average, 16 percent greater than the corresponding permit valuations.² Permit valuations of privately financed residential construction accordingly should be increased by 16 percent to arrive at estimated construction costs. No adjustment is necessary for publicly financed projects, since construction contracts are reported directly to the Bureau in such cases. On the basis of this information, the 100,000 new units provided during the first 3 months of 1940 involved expenditures of about \$383,000,000 for labor and materials, of

² For summary of preliminary results of this study see Monthly Labor Review for October 1939.

which \$32,000,000 represents contract values on public housing projects.

The estimated permit valuation of new privately financed dwellings during the first quarter of 1940 and the contract awards for construction on public housing projects are given in table 6.

TABLE 6.—*Permit Valuation of New Dwellings in Nonfarm Areas During First 3 Months of 1940, by Source of Funds and Geographic Division*

Geographic division	Estimated permit valuation		
	Total	Private	USHA ¹
Total United States.....	\$334,943,000	\$303,041,000	\$31,902,000
New England.....	13,566,000	10,312,000	3,254,000
Middle Atlantic.....	79,629,000	74,444,000	5,185,000
East North Central.....	50,831,000	48,948,000	1,883,000
West North Central.....	14,175,000	13,283,000	892,000
South Atlantic.....	54,463,000	47,731,000	6,732,000
East South Central.....	10,041,000	8,586,000	1,455,000
West South Central.....	36,614,000	26,125,000	10,489,000
Mountain.....	9,598,000	8,823,000	775,000
Pacific.....	66,026,000	64,789,000	1,237,000

¹ Contract values.

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, JUNE 1940 ¹

THE volume of new residential construction in June 1940, as measured by the value of permits issued, was 22.7 percent less than in May. Decreases which ranged from 2.6 percent in cities with a population of 1,000 and under 2,500, to 29.9 percent in cities with a population of 500,000 and over, were reported in all city-size groups. Permit valuations of new nonresidential construction and additions, alterations, and repairs, however, increased in June. New nonresidential construction showed an increase of 1.2 percent and additions, alterations, and repairs to existing structures gained 11.4 percent. All classes of construction showed a loss of 11.7 percent from the preceding month.

As compared with June 1939, the volume of new residential construction decreased 7.1 percent while new nonresidential construction showed a loss of 25.6 percent. Permit valuations of additions, alterations, and repairs to existing structures were 9.3 percent higher than in June 1938, while all classes of construction combined declined 10.7 percent.

¹ More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, June 1940," copies of which will be furnished upon request.

Comparison of June 1940 with May 1940 and June 1939

A summary of building construction in 2,096 identical cities in June 1940, May 1940, and June 1939 is given in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,096 Identical Cities, June 1940*

Class of construction	Number of buildings			Permit valuation		
	June 1940	Percentage change from—		June 1940	Percentage change from—	
		May 1940	June 1939		May 1940	June 1939
All construction.....	70,411	-14.5	-1.2	\$177,776,483	-11.7	-10.7
New residential.....	20,303	-14.0	+1.1	94,036,592	-22.7	-7.1
New nonresidential.....	12,086	-13.7	+1.6	49,361,128	+1.2	-25.6
Additions, alterations, and repairs.....	38,022	-15.0	-3.2	34,378,763	+11.4	+9.3

A summary of permit valuations of housekeeping dwellings and the number of families provided for in new dwellings in 2,096 identical cities, having a population of 1,000 and over, is shown in table 2 for June 1940 compared with May 1940 and June 1939.

TABLE 2.—*Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,096 Identical Cities, June 1940*

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for in new dwellings		
	June 1940	Percentage change from—		June 1940	Percentage change from—	
		May 1940	June 1939		May 1940	June 1939
All types.....	\$92,238,616	-20.5	-7.3	25,159	-20.9	-6.6
1-family.....	76,040,307	-12.5	+7.1	19,052	-12.9	+5.4
2-family ¹	3,390,626	-14.5	-53.3	1,294	-14.0	-37.5
Multi-family ²	12,807,683	-49.2	-39.9	4,813	-42.9	-29.0

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Construction During First 6 Months, 1939 and 1940

Cumulative totals for the first 6 months of 1940 compared with the same months of the preceding year are shown in table 3. The data are based on reports received from cities having a population of 1,000 and over.

TABLE 3.—*Permit Valuation of Building Construction in Reporting Cities of 1,000 Population and Over, First 6 Months, 1939 and 1940*

Class of construction	Permit valuation of building construction, first 6 months of—		Percentage change
	1940	1939	
All construction.....	\$999,981,776	\$1,027,404,405	-2.7
New residential.....	577,807,495	545,931,684	+5.8
New nonresidential.....	255,868,880	303,920,785	-15.8
Additions, alterations, and repairs.....	166,305,401	177,551,936	-6.3

Table 4 presents the permit valuation of housekeeping dwellings and number of family-dwelling units provided in cities with a population of 1,000 and over for the first 6 months of 1939 and 1940.

TABLE 4.—*Permit Valuation of Housekeeping Dwellings and Number of Family-Dwellings Units, First 6 Months, 1939 and 1940, by Type of Dwelling*

Type of dwelling	Permit valuation of housekeeping dwellings, first 6 months of—		Percentage change	Number of family-dwelling units, first 6 months of—		Percentage change
	1940	1939		1940	1939	
All types.....	\$566,739,529	\$539,054,722	+5.1	157,843	148,329	+6.4
1-family.....	405,796,592	379,002,174	+7.1	103,267	97,065	+6.4
2-family ¹	19,705,354	24,455,752	-19.4	7,897	8,617	-8.4
Multifamily ²	141,237,583	135,596,796	+4.2	46,679	42,647	+9.5

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Analysis by Size of City, June 1940

Table 5 shows the value of permits issued for building construction in June 1940 compared with May 1940 and June 1939, by size of city and by class of construction.

TABLE 5.—*Permit Valuation of Building Construction in 2,096 Identical Cities, by Size of City, June 1940*

Size of city	Number of cities	Total construction			New residential buildings		
		Permit valuation, June 1940	Percentage change from—		Permit valuation, June 1940	Percentage change from—	
			May 1940	June 1939		May 1940	June 1939
Total, all reporting cities.....	2,096	\$177,776,483	-11.7	-10.7	\$94,036,592	-22.7	-7.1
500,000 and over.....	14	51,164,668	-9.8	-32.1	21,697,980	-29.9	-41.5
100,000 and under 500,000.....	79	44,117,217	-16.5	+5.0	22,937,408	-28.5	+10.2
50,000 and under 100,000.....	97	16,693,630	-12.4	-2.9	8,372,377	-26.0	+11.8
25,000 and under 50,000.....	160	18,796,288	-1.8	+8.3	9,440,193	-12.5	+10.6
10,000 and under 25,000.....	422	22,769,939	-16.9	-9.9	14,632,741	-17.4	+10.0
5,000 and under 10,000.....	383	13,953,641	-3.6	+28.4	9,356,943	-11.3	+25.9
2,500 and under 5,000.....	463	6,303,914	-17.4	-21.9	4,649,680	-9.9	+4.8
1,000 and under 2,500.....	478	3,977,186	-1.3	+36.2	2,949,270	-2.6	+39.8

TABLE 5.—Permit Valuation of Building Construction in 2,096 Identical Cities, by Size of City, June 1940—Continued

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	Permit valuation, June 1940	Percentage change from—		Permit valuation, June 1940	Percentage change from—		
		May 1940	June 1939		May 1940	June 1939	
Total, all reporting cities.....	\$49,361,128	+1.2	-25.6	\$34,378,763	+11.4	+9.3	60,105,824
500,000 and over.....	17,180,000	+10.3	-37.3	12,286,688	+20.4	+13.3	21,449,833
100,000 and under 500,000.....	12,896,390	-6.1	-5	8,283,419	+18.3	-5	15,017,880
50,000 and under 100,000.....	4,502,943	+7.5	-32.2	3,818,310	+7.6	+24.6	6,438,866
25,000 and under 50,000.....	5,489,576	+10.3	-1.6	3,866,519	+14.5	+19.1	5,611,844
10,000 and under 25,000.....	4,761,516	-17.4	-42.3	3,375,682	-14.2	-9.2	6,487,251
5,000 and under 10,000.....	2,974,471	+36.9	+36.6	1,622,227	-6.9	+28.7	2,676,839
2,500 and under 5,000.....	901,109	-49.3	-68.8	753,125	+9.2	+1.7	1,655,723
1,000 and under 2,500.....	655,123	+10.6	+34.7	372,793	+4	+14.6	767,568

The permit valuation of housekeeping dwellings in the 2,096 identical cities reporting for May and June 1940, together with the number of family-dwelling units provided in new dwellings, by size of city, is given in table 6.

TABLE 6.—Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,096 Identical Cities, by Size of City, May and June, 1940

Size of city	Permit valuation of housekeeping dwellings			Number of families provided for in—							
	June 1940	May 1940	Percentage change	All types		1-family dwellings		2-family dwellings ¹		Multi-family dwellings ¹	
				June 1940	May 1940	June 1940	May 1940	June 1940	May 1940	June 1940	May 1940
Total, all reporting cities.....	\$92,238,616	\$116,077,328	-20.5	25,159	31,810	19,052	21,883	1,294	1,504	4,813	8,423
500,000 and over.....	21,473,115	30,531,489	-29.7	5,457	7,903	4,052	4,696	292	475	1,113	2,732
100,000 and under 500,000.....	22,736,568	29,353,491	-22.5	6,636	8,539	3,973	4,602	347	360	2,316	3,577
50,000 and under 100,000.....	8,290,477	11,072,600	-25.1	2,155	3,136	1,872	2,172	164	164	119	800
25,000 and under 50,000.....	9,203,902	10,547,324	-12.7	2,611	2,867	2,012	2,363	225	169	374	335
10,000 and under 25,000.....	14,523,161	17,110,160	-15.1	3,995	4,584	3,472	4,001	124	151	399	432
5,000 and under 10,000.....	8,508,443	9,361,238	-9.1	2,380	2,577	1,871	2,044	78	90	431	443
2,500 and under 5,000.....	4,553,680	5,079,228	-10.3	1,179	1,391	1,106	1,247	33	58	40	86
1,000 and under 2,500.....	2,949,270	3,021,798	-2.4	746	813	694	758	31	37	21	18

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

The information on building permits issued is based on reports received by the Bureau of Labor Statistics from 2,096 identical cities having a population of 1,000 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. In New York and North Carolina the information from the smaller cities is collected

by the Bureau of Labor Statistics from local building officials and the information from the larger cities is collected and forwarded to the Bureau by the State departments of labor. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State Governments in the cities included in the report. For June 1940 the value of these buildings amounted to \$14,192,000, for May 1940 to \$20,228,000, and for June 1939 to \$39,532,000.

Construction from Public Funds

The value of contracts awarded and force-account work started during June 1940, May 1940, and June 1939 on construction projects financed wholly or partially from various Federal funds is shown in table 7.

TABLE 7.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed from Federal Funds, May and June 1940 and June 1939*¹

Federal agency	Contracts awarded and force-account work started—		
	June 1940	May 1940 ²	June 1939 ²
Total.....	\$331, 193, 724	\$90, 858, 672	\$214, 321, 378
Public Works Administration:			
Federal.....	264, 545	2, 347, 202	4, 267, 806
Non-Federal:			
N. I. R. A.....	60, 293	88, 500	678, 283
E. R. A. A.....	299, 452	250, 562	702, 298
P. W. A. A., 1938.....	2, 569, 181	7, 179 389	51, 067, 086
Federal agency projects under W. P. A.....	4, 312	156, 745	3, 412, 062
Regular Federal appropriations.....	321, 419, 151	62, 184, 430	144, 691, 395
U. S. Housing Authority.....	6, 576, 790	18, 651, 844	9, 502, 448

¹ Preliminary, subject to revision.

² Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for June 1940, May 1940, and June 1939 is shown in the following statement:

	Public buildings	Highway construction
June 1940.....	\$4, 971, 764	\$12, 595, 487
May 1940.....	814, 717	13, 104, 454
June 1939.....	1, 893, 696	5, 017, 854

Retail Prices

FOOD PRICES IN JUNE 1940

THE average retail cost of food increased 1.3 percent between May 14 and June 18, due to higher costs for fresh fruits and vegetables and sizable advances in the costs of beef, lamb, and roasting chickens. All other commodity groups declined except eggs and dried fruits and vegetables which remained unchanged.

The index for all foods for June was 98.3 percent of the 1935-39 average and was 5 percent higher than a year ago when the index stood at 93.6. Of the four major commodity groups for which increases were reported for the year, fruits and vegetables showed the greatest change with an advance of 15 percent. Other increases were dairy products, 8.5 percent, cereals and bakery products, 3.8 percent, and sugar, 1.8 percent. The greatest decrease shown for the yearly interval was 5.0 percent for fats and oils. Decreases were also reported for meats, eggs, and beverages. June food costs were only 0.1 percent lower than costs in September 1939. Only two commodity groups, fruits and vegetables, and cereals and bakery products, showed increases over September of last year.

Details by Commodity Groups

The cost of cereals and bakery products declined 0.7 percent as a result of reduced prices for flour in 48 cities and for white bread in 7 cities. In response to greatly reduced prices of wheat, the price of flour declined 3.5 percent to the lowest average for the year, but was still 21.3 percent higher than a year ago. The first decline of the year for white bread amounted to 1.2 percent. It was still priced 2.5 percent higher than a year ago. Other changes in the group were a decrease of 0.4 percent in the price of vanilla cookies and an increase of 1.1 percent in the price of rye bread.

Meat costs advanced for the fourth consecutive month as a result of increases for beef, lamb, and roasting chickens. The increase for the month amounted to 1.2 percent, but costs for the group were still 0.7 percent lower than for a year ago. An increase of 1.7 percent in the beef items in June resulted from advances of 3.1 percent for round steak and 1.8 percent for chuck roast. The average price of rib roast

remained unchanged. Retail prices of pork dropped 1.7 percent between May and June after moving steadily upward during the past 3 months from a 6-year low in February. This past month, prices of pork chops declined 3.6 percent and were 9.8 percent lower than a year ago, and prices of sliced bacon and salt pork also declined to a level more than 15 percent lower than in June 1939. Price increases were reported for whole and sliced ham (0.5 percent), for various cuts of lamb including leg of lamb and lamb rib chops (5 percent), and for roasting chickens. Prices of fresh fish declined 0.5 percent and canned salmon increased about 0.5 percent.

The average cost of dairy products declined 0.9 percent due to continued seasonal declines for butter and fresh milk. Butter prices were lower in 45 of the 51 cities with an average decline of 2 percent for 51 cities combined. The average price of butter was 10.2 percent higher than a year ago but was at the lowest level for any month since August 1939. Fresh milk declined for the third consecutive month by 0.8 percent. Prices of cheese declined about 2.0 percent and evaporated milk showed no change. Egg prices, which usually rise during this season, remained unchanged.

Prices for fruits and vegetables as a group rose 5.7 percent, due to widespread sharp advances in the prices of apples, carrots, and lettuce ranging from 24 to 33 percent and to higher prices for oranges (6.4 percent) and for sweetpotatoes. Prices of apples and carrots were higher than at any time since June 1937, while lettuce was higher than for any month since April 1938. Potato prices, contrary to the usual seasonal movement, showed a decline of 1.3 percent, while prices of fresh vegetables such as cabbage, green beans, and spinach were reduced seasonally. Prices of canned peas declined 0.7 percent. Prices of canned pineapple dropped 0.5 percent to the lowest level since this item was first priced in January 1935.

The price of coffee was reduced by 0.9 percent to the lowest level since 1913 when average prices were first published by the Bureau. Prices of tea increased 0.6 percent. Sugar prices remained steady.

The index for fats and oils moved downward 1.1 percent as a result of a substantial decline of 3.2 percent in the price of lard and relatively smaller declines in the price of shortening in cartons and in the price of salad dressing. Lard prices hit a new low in June which has not been equalled since December 1933.

Indexes of retail food costs for June and May 1940 and June 1939 are shown in table 1. The accompanying chart on the 1935-39 base shows the trend in the cost of all foods and of each major commodity group for the period January 1929 to June 1940, inclusive.

RETAIL COST OF FOOD

1935-39=100

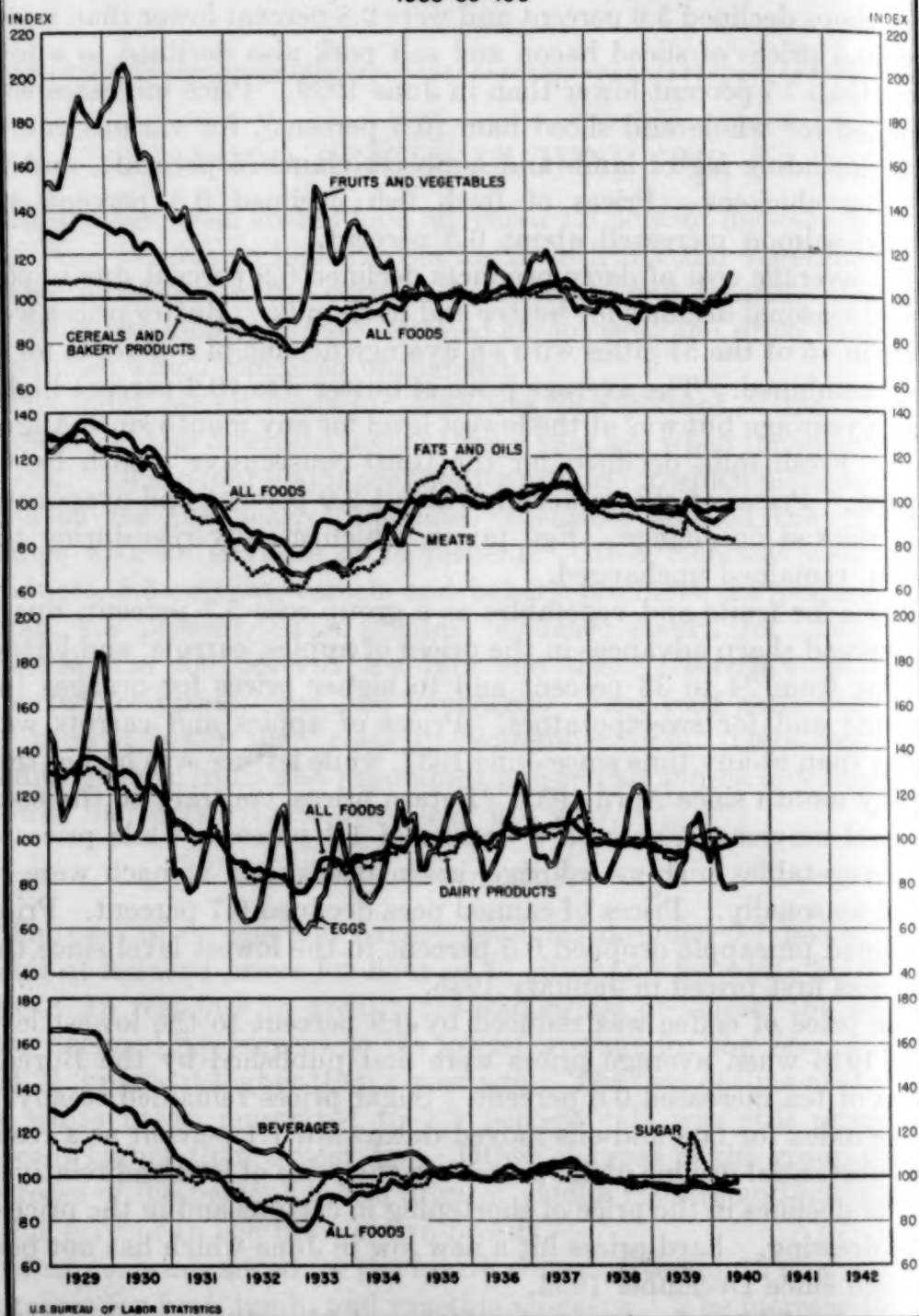


TABLE 1.—*Indexes of Retail Food Costs in 51 Large Cities Combined,¹ by Commodity Groups, June and May 1940 and June 1939*

[1935-39=100]

Commodity group	1940		1939
	June 18 ²	May 14	June 13
All foods.....	98.3	97.0	93.6
Cereals and bakery products.....	97.7	98.4	94.1
Meats.....	96.0	94.9	96.7
Dairy products.....	98.2	99.1	90.5
Eggs.....	77.9	77.9	79.2
Fruits and vegetables.....	110.6	104.6	96.2
Fresh.....	115.7	107.8	97.7
Canned.....	92.7	92.9	91.5
Dried.....	100.9	100.9	90.1
Beverages.....	92.8	93.3	95.0
Fats and oils.....	82.0	82.9	86.3
Sugar.....	97.2	97.3	95.5

¹ Aggregate costs of 54 foods in each city weighted to represent total purchases of families of wage earners and lower-salaried workers have been combined with the use of population weights.

² Preliminary.

Prices of 15 of the 54 foods included in the indexes were higher in June than in May, 20 were lower, and for 19 there was no change. Compared with a year ago, 31 of the 54 foods were higher, 16 were lower, and for 5 there was no change. No yearly comparison can be made for vanilla cookies or salad dressing, as they were not priced a year ago. Average prices of each of the 63 foods for 51 cities combined are shown in table 2 for May and June 1940 and June 1939.

TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined,¹ June and May 1940 and June 1939*

Article	1940		1939
	June 18 ²	May 14	June 13
Cereals and bakery products:			
Cereals:			
Flour, wheat.....10 pounds.....	Cents 43.9	Cents 45.5	Cents 36.2
Macaroni.....pound.....	14.1	14.1	14.1
Wheat cereal ³.....28-oz. package.....	23.7	23.7	24.0
Corn flakes.....8-oz. package.....	7.1	7.1	7.2
Corn meal.....pound.....	4.2	4.2	4.0
Rice ⁴.....do.....	7.9	7.9	7.5
Rolled oats ⁵.....do.....	7.2	7.2	7.1
Bakery products:			
Bread, white.....do.....	8.1	8.2	7.9
Bread, whole-wheat.....do.....	9.0	9.0	9.0
Bread, rye.....do.....	9.6	9.5	9.2
Vanilla cookies.....do.....	25.0	25.1	-----
Soda crackers.....do.....	15.1	15.1	14.9
Meats:			
Beef:			
Round steak.....do.....	36.1	35.0	36.2
Rib roast.....do.....	28.5	28.5	29.7
Chuck roast.....do.....	22.7	22.3	23.4
Veal:			
Cutlets.....do.....	42.2	42.0	42.2
Pork:			
Chops.....do.....	26.7	27.7	29.6
Bacon, sliced.....do.....	26.1	26.2	31.2
Ham, sliced ⁶.....do.....	42.9	42.7	46.9
Ham, whole.....do.....	23.8	23.7	27.8
Salt pork.....do.....	13.7	13.8	16.9

See footnotes at end of table.

TABLE 2.—Average Retail Prices of 63 Foods in 51 Large Cities Combined,¹ June and May 1940 and June 1939—Continued

Article	1940		1939
	June 18 ²	May 14	June 13
Meats—Continued.			
Lamb:			
Leg.....pound.....	Cents 30.2	Cents 28.7	Cents 30.0
Rib chops.....do.....	39.2	37.3	38.9
Poultry:			
Roasting chickens.....do.....	33.4	32.3	31.5
Fish:			
Fresh, frozen.....do.....	(⁴)	(⁴)	(⁴)
Salmon, pink.....16-oz. can.....	15.7	15.6	12.6
Salmon, red ³.....do.....	25.7	25.6	23.0
Dairy products:			
Butter.....pound.....	33.6	34.3	30.5
Cheese.....do.....	25.3	25.8	24.8
Milk, fresh (delivered).....quarts.....	12.5	12.6	11.5
Milk, fresh (store).....do.....	11.3	11.3	10.4
Milk, fresh (delivered and store) ³.....do.....	12.1	12.2	11.1
Milk, evaporated.....14½ oz. can.....	6.9	6.9	6.7
Eggs.....dozen.....	27.5	27.4	27.9
Fruits and vegetables:			
Fresh:			
Apples.....pound.....	7.2	5.8	6.1
Bananas.....do.....	6.4	6.4	6.1
Oranges.....dozen.....	33.2	31.2	28.7
Beans, green.....pound.....	8.7	9.8	8.7
Cabbage.....do.....	3.6	4.1	3.5
Carrots.....bunch.....	7.2	5.4	5.4
Lettuce.....head.....	10.6	8.4	7.7
Onions.....pound.....	6.9	6.9	3.9
Potatoes.....15 pounds.....	44.6	45.2	41.0
Spinach.....pound.....	5.0	5.3	5.6
Sweetpotatoes.....do.....	5.7	5.2	5.4
Canned:			
Peaches.....No. 2½ can.....	17.2	17.2	17.0
Pineapple.....do.....	20.9	21.0	21.1
Beans, green ³.....No. 2 can.....	10.0	10.0	9.9
Corn.....do.....	10.5	10.5	10.2
Peas.....do.....	13.7	13.8	13.5
Tomatoes.....do.....	8.5	8.5	8.7
Dried:			
Prunes.....pound.....	9.8	9.8	8.9
Navy beans.....do.....	6.6	6.6	5.8
Beverages:			
Coffee.....do.....	21.3	21.5	22.3
Tea.....¼ pound.....	17.5	17.4	17.3
Cocoa ³.....8-oz. can.....	9.1	9.1	8.6
Fats and oils:			
Lard.....pound.....	9.2	9.5	10.4
Shortening, other than lard:			
In cartons.....do.....	11.8	11.9	11.8
In other containers.....do.....	19.2	19.2	20.3
Salad dressing ⁴.....pint.....	20.8	21.0	.....
Oleomargarine.....pound.....	16.0	16.0	16.4
Peanut butter.....do.....	18.1	18.1	17.9
Sugar and sweets:			
Sugar.....10 pounds.....	52.3	52.3	51.6
Corn sirup ³.....24-oz. can.....	13.5	13.4	13.7
Molasses ³.....18-oz. can.....	13.4	13.4	13.6

¹ Since September 1939, supermarket prices have been substituted for those of certain service stores.² Preliminary.³ Not included in index—Prices for these items for June 1939 are weighted averages.⁴ Composite prices not computed.⁵ Effective January 1940, salad dressing replaced mayonnaise in the food-cost index.

Details by Regions and Cities

Increases in food costs between May and June were reported for 36 cities, decreases for 14 and for 1 there was no change.

Nearly all cities in the New England, Middle Atlantic, East North Central, West North Central, Mountain, and Pacific areas showed increases while lower costs were reported from all cities in the East and West South Central areas. In the South Atlantic area increases were reported for 5 cities and decreases for 3.

The 3 cities showing the largest increases were Salt Lake City, 3.7 percent; Jacksonville, 2.7 percent; and New York, 2.6 percent. In Salt Lake City, higher costs were due to advances for all commodity groups except cereals, bakery products, and beverages. An increase of 20.4 percent for fresh fruits and vegetables in Jacksonville, largely because of higher prices for apples and oranges, was the largest increase shown for this group for any city covered by the Bureau. New York costs rose as a result of greater-than-average increases for meats, fresh fruits, and vegetables.

The four cities showing declines of 1 percent or more were Little Rock, 1.9 percent; Dallas, 1.4 percent; Norfolk, 1.4 percent; and Memphis, 1.2 percent. Substantial declines for meats combined with lower costs for fresh fruits and vegetables resulted in the decreases shown for Norfolk, Little Rock, and Memphis. In Dallas a greater-than-average decline for fresh fruits and vegetables, along with decreases in all other major commodity groups except meats and sugar, resulted in lower costs for the city.

Indexes of food costs by cities are presented in table 3 for June and May 1940 and June 1939.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Cities,¹ June and May 1940 and June 1939
[1935-39=100]

Region and city	1940		1939	Region and city	1940		1939
	June 18 ²	May 14	June 13		June 18	May 14	June 13
United States.....	68.3	97.0	93.6	South Atlantic:			
New England:				Atlanta.....	93.2	93.1	92.7
Boston.....	98.9	96.9	94.4	Baltimore.....	98.7	99.1	96.1
Bridgeport.....	98.4	97.5	94.9	Charleston, S. C.....	95.6	95.2	94.4
Fall River.....	100.3	98.4	94.0	Jacksonville.....	100.4	97.8	94.6
Manchester.....	99.8	98.4	95.1	Norfolk.....	94.7	96.0	92.1
New Haven.....	98.6	97.3	93.9	Richmond.....	92.7	93.4	90.1
Portland, Maine.....	96.9	95.7	92.1	Savannah.....	99.6	98.9	95.1
Providence.....	99.5	98.3	93.8	Washington, D. C.....	98.3	96.9	93.6
Middle Atlantic:				East South Central:			
Buffalo.....	100.1	99.4	94.8	Birmingham.....	92.0	92.1	89.4
Newark.....	101.0	99.1	95.6	Louisville.....	95.2	95.3	92.3
New York.....	101.1	98.5	93.7	Memphis.....	92.8	93.9	90.6
Philadelphia.....	95.9	94.8	93.7	Mobile.....	97.3	97.8	95.6
Pittsburgh.....	98.0	96.8	92.7	West South Central:			
Rochester.....	101.6	100.3	93.5	Dallas.....	91.2	92.5	89.5
Scranton.....	98.3	98.3	93.1	Houston.....	97.9	98.6	95.7
East North Central:				Little Rock.....	95.3	97.1	92.2
Chicago.....	99.5	98.3	93.1	New Orleans.....	100.8	101.3	95.1
Cincinnati.....	94.5	94.4	90.3	Mountain:			
Cleveland.....	99.0	97.1	96.1	Butte.....	99.0	98.4	97.0
Columbus, Ohio.....	94.0	92.9	89.0	Denver.....	96.2	96.7	94.5
Detroit.....	98.3	96.6	92.4	Salt Lake City.....	101.0	97.4	97.7
Indianapolis.....	96.7	95.6	92.2	Pacific:			
Milwaukee.....	98.1	96.8	92.6	Los Angeles.....	97.4	96.5	94.1
Peoria.....	100.1	99.4	95.8	Portland, Oreg.....	99.8	98.2	97.2
Springfield, Ill.....	98.2	97.4	95.1	San Francisco.....	96.7	95.5	93.5
West North Central:				Seattle.....	99.7	99.8	95.9
Kansas City.....	92.9	92.3	92.8				
Minneapolis.....	97.9	95.7	96.4				
Omaha.....	98.1	98.2	94.2				
St. Louis.....	97.5	96.7	93.1				
St. Paul.....	97.2	96.0	95.5				

¹ Aggregate costs of 54 foods in each city weighted to represent total purchases of families of wage earners and lower salaried workers have been combined for the United States with the use of population weights.

² Preliminary.

ELECTRICITY AND GAS

Price Changes Between March and June 1940

RESIDENTIAL rates are secured quarterly from 51 cities for electricity and from 50 cities for gas. These cities are those included in the composite indexes for all foods. The rates are used in the computation of series of prices both for electricity and for gas. The blocks of consumption which have been selected as the bases of these prices are representative of average conditions throughout the country.

ELECTRICITY

Prices of electricity are based upon the monthly use of 25 kilowatt-hours for lighting and small energy-consuming appliances; 100 kilowatt-hours for greater use of lighting and small appliances, and an electric refrigerator; and 250 kilowatt-hours for a still greater use of lighting, a larger number of small appliances, and both an electric refrigerator and an electric range.

Reductions in residential rates between March and June 1940 were shown for 4 of the 51 cities. In New York City, lower rates for Richmond Borough provided the greatest reduction, 15.8 percent, for customers using 100 kilowatt-hours, with gradually diminishing reductions as the consumption increased or decreased from that point. Slight decreases for the Boroughs of The Bronx, Brooklyn, Manhattan, and Queens resulted from automatic rate adjustments based on lower fuel costs. In Louisville, as in Richmond Borough of New York City, the greatest benefit accrued to customers using 100 kilowatt-hours, with diminishing reductions above and below that point. Pittsburgh reported the greatest decline for customers using 150 or more kilowatt-hours. The average to customers using less than that amount of electricity varied somewhat because of the division of these kilowatt-hours into comparatively small blocks at different rates. The introduction of an "optional" rate schedule in Columbus lowered the cost 9.1 percent to customers using 250 kilowatt-hours.

Percentage decreases under the new rates in these 4 cities to customers using 25, 100, and 250 kilowatt-hours per month are shown in table 4.

TABLE 4.—Percentage Decrease in Retail Prices of Specified Monthly Consumptions of Electricity Between Mar. 15, 1940, and June 15, 1940, by Cities

City	Percentage decrease in price of—			City	Percentage decrease in price of—		
	25 kwh	100 kwh	250 kwh		25 kwh	100 kwh	250 kwh
New York:				Pittsburgh.....	0	5.0	15.3
Company 1 ¹	0	0.4	0.6	Columbus: Company 1.....	0	0	9.1
Company 3 ²	7.4	15.8	9.8	Louisville.....	12.6	14.4	7.8

¹ Serving Boroughs of The Bronx, Brooklyn, Manhattan, and Queens.² Serving Richmond Borough.

GAS

Prices of gas are based upon 10.6 therms for the use of a range; 19.6 therms for range and manual type water heater; 30.6 therms for range and automatic storage or instantaneous water heater; and 40.6 therms for range, automatic water heater, and gas refrigerator.

Changes in prices of gas between March and June 1940 were reported for 7 cities—3 cities serving manufactured gas; 1, natural gas; and 3, mixed manufactured and natural gas. Lower prices were recorded for all of these cities except 2 serving mixed manufactured and natural gas. Records of an increase in the heating value of natural gas in Mobile, effective in March, were not available for publication at that time and are included in this report.

Percentage change in prices to customers using 10.6 therms, 19.6 therms, 30.6 therms and 40.6 therms of gas per month are shown in table 5.

TABLE 5.—Percentage Change in Retail Prices of Specified Monthly Consumptions of Gas Between Mar. 15 and June 15, 1940, by Cities

Kind of gas and city	Heating value per cubic foot in British thermal units	Percentage change in price of—			
		10.6 therms	19.6 therms	30.6 therms	40.6 therms
Manufactured gas:					
New York:					
Company 1 ¹	540	0	-6.0	-16.4	-20.9
Company 3 ²	540	0	-3.2	-10.8	-14.4
Richmond.....	530	-1.1	-8	-1.0	-9
Birmingham:					
Immediate.....	520	0	-3.0	-4.9	-6.9
Objective ³	520		-11.6	-27.2	-31.4
Natural Gas:					
Mobile: ⁴					
Present.....	1,010	-2.2	-2.9	-1.5	-2.0
Objective.....	1,010	-2.0	-2.7	-1.7	-2.1
Houston:					
Company 1.....	1,066	-14.0	-9.4	-6.8	-5.4
Company 3.....	1,027	-13.7	-9.2	-6.6	-5.2
Mixed manufactured and natural gas:					
Chicago.....	800	-14.2	-8.8	-6.4	-5.6
Cincinnati.....	875	+5.9	+5.9	+6.1	+5.4
Louisville.....	900	+16.3	+13.3	+12.7	+11.2

¹ Serving Boroughs of The Bronx, Brooklyn, Manhattan, and Queens. ² Serving Richmond Borough.³ The "objective" rate was designed to encourage greater use of gas and was available to customers whose consumption exceeded that of the corresponding month of an earlier period. It was not applicable to customers using 10.6 therms.⁴ Information relating to increase in heating value of gas applicable in March, was not received in time to be included in the report for that month.

The greatest decrease reported between March and June was in Birmingham for domestic customers using over 2,000 cubic feet of gas per month. Reductions for approximately 20 percent of the customers, i. e., those served under the "objective" rate, ranged from 11.6 percent for 19.6 therms to 31.4 percent for 40.6 therms. The decreases for customers served under the "immediate" rate ranged from 3.0 percent to 6.9 percent, respectively. Reductions for the other two cities using manufactured gas provided substantially lower prices for the larger part of New York City and a slight decrease in Richmond, Va. Lower prices in New York City resulted from the introduction of the usual summer rates in the Boroughs of The Bronx, Manhattan, and Queens, and of a new rate schedule in Brooklyn. The reductions were applicable to all domestic customers in these boroughs whose use of gas exceeded 3,100 cubic feet per month. In Richmond, Va., a decrease of about 1.0 percent was due to a slight increase in the heating value of the gas.

For cities using natural gas, the greatest reduction occurred in Houston where two companies serving about 80 percent of the domestic customers introduced new rate schedules. Prices were lowered about 14 percent for customers using 10.6 therms of gas per month, with gradually diminishing reductions as the consumption increased. In Mobile, an increase in the heating value of the gas, effective in March, resulted in a price decrease of about 2.0 percent.

Of cities using mixed manufactured and natural gas, Chicago reported a lower rate which provided the greatest decrease to customers using a comparatively small amount of gas. In Cincinnati, the usual summer decrease in the heating value of the gas and the resulting increase in cost was in effect in June. This difference in the heating value of the gas between the summer and winter seasons was established by agreement between the utility company and the city of Cincinnati in November 1938. Louisville reported an advance in rates which showed the greatest increase for users of small amounts of gas.



INCREASE IN FOOD PRICES IN THE SOVIET UNION¹

FOLLOWING the general and acute shortage of foodstuffs, which became especially pronounced after the outbreak of the Soviet-Finnish war, the Soviet authorities raised the prices of certain essentials, first on January 24, 1940, and again on April 10.

The price increases, effective April 10, 1940, apply to many essential foodstuffs, although not to bread, sugar, flour, and milk, and apply to

¹ Data supplied by the American Embassy, Moscow.

most of the commodities on which prices had been raised January 24, 1940. For the purposes of comparison the following table shows the prices of certain essential foodstuffs on January 1, 1939, and on January 24 and April 10, 1940. Prices on January 1, 1940, are not listed in the table because a great many of the items were not available on that date. In the table all prices are quoted in paper rubles, the actual value of which is rather obscure (see Monthly Labor Review, November 1939, p. 1277, and May 1940, p. 1272).

Retail Prices in Moscow State Stores of Certain Essential Foodstuffs on Jan. 1, 1939, Jan. 24, and Apr. 10, 1940

[Foodstuffs usually consumed by an ordinary family with an average income]

Provisions available on date shown	Units ¹	Retail prices on—			Percent of increase on Apr. 10, 1940, over—	
		Jan. 1, 1939	Jan. 24, 1940	Apr. 10, 1940	Jan. 1, 1939	Jan. 24, 1940
		Rubles	Rubles	Rubles		
Bread, black, rye	Kg	0.85	0.85	0.85		
Bread, white, wheat	Kg	1.70	1.70	1.70		
Sugar, lump	Kg	4.10	5.50	5.50	34.1	
Beef, for soup	Kg	8.00	12.00	16.00	100.0	33.3
Mutton	Kg	8.00	14.00	18.00	125.0	28.6
Ham, smoked	Kg	18.00	24.00	27.00	50.0	12.5
Sausage, ordinary	Kg	10.00	13.50	16.00	60.0	18.5
Sausage, hamburger	Kg	16.00	22.00	26.00	62.5	18.2
Potatoes	Kg	.50	.80	1.20	140.0	50.0
Butter	Kg	20.00	(²)	28.00	40.0	
Cheese:						
Second quality	Kg	19.10	(²)	26.00	36.1	
Best quality	Kg	24.80	24.80	(²)		
Peas, green, canned	500 gm	2.80	(²)	5.10	82.1	
Sausages, canned	330 gm	3.10	(²)	6.00	93.5	
Milk	Liter	2.10	(²)	2.10		
Candy (bon-bons), first quality	Kg	16.80	27.00	43.00	155.9	59.3

¹ Kilogram (1,000 grams) = 2.2046 pounds; liter = 1.0567 quart (liquid).

² Not available.

It should be observed, that such commodities as meat, potatoes, butter, cheese, milk, sugar, and many others are sold only in limited quantities. This fact serves as a further indication both of the continuing shortage of these commodities and of the possibility of further price increases in the future.

Gas, water, and electricity rates have also been increased recently in Moscow, these increases ranging from 25 to 100 percent. It is further expected that rents as well as prices on textile manufactures, will shortly be raised.

The obligatory deliveries of agricultural products to the State are henceforth to be based on the areas of arable land in each collective farm (exclusive of areas sown to technical crops) rather than on the sowing areas.

Wholesale Prices

WHOLESALE PRICES IN JUNE 1940¹

FOLLOWING the outbreak of war in Europe, wholesale commodity prices rose sharply to 79.4 percent of the 1926 average in October 1939 from a low of 75.0 in August. Prices held firmly through January 1940, when the all-commodity index stood nearly 6 percent above the August 1939 level. In February 1940, the movement was reversed and except for a slight upturn in April the Bureau of Labor Statistics index fell steadily to the 1940 low point, 77.5 in June. The cumulative decline during the first half of 1940 was about 2½ percent.

Compared with June of last year the index for each group except fuel and lighting materials showed a substantial net gain. The increases range from 1.2 percent for chemicals and allied products to 7.9 percent for textile products.

From May to June of this year the all-commodity index dropped 1.1 percent. Eight of the 10 commodity group indexes declined during the month. Farm products dropped 2.5 percent; hides and leather products, 2.1 percent; foods, 1.5 percent; chemicals and allied products, 0.8 percent; miscellaneous commodities, 0.5 percent; textile products, 0.4 percent; fuel and lighting materials, 0.4 percent; and building materials, 0.1 percent. Metals and metal products advanced 0.2 percent and housefurnishing goods remained unchanged at the May level.

Weakening prices for agricultural commodities, together with lower quotations for cocoa beans, pepper, hides, skins, raw silk, hemp, sisal, crude petroleum, tankage, and copra, caused the raw materials group index to drop 1.8 percent from May to June. The semimanufactured commodities group index receded 0.5 percent as a result of lower prices for raw sugar, print cloth, vegetable oils, leather, yarns, linseed oil, rosin, turpentine, tallow, and wax. Manufactured commodity prices decline 1 percent during the month.

Nonagricultural commodity prices decreased 0.9 percent over the month, according to the index for "All commodities other than farm products." Industrial commodity prices, as measured by the index for "All commodities other than farm products and foods," also averaged lower.

¹More detailed information on wholesale prices is given in the Wholesale Prices pamphlet and will be furnished upon request.

Among the outstanding changes in subgroup indexes during June were decreases of over 14 percent for cattle feed, more than 11 percent for hides and skins, nearly 10 percent for grains, 7 percent for livestock and poultry, 4.8 percent for fertilizer materials, 4.4 percent for cereal products, and 4.2 percent for meats. Fruits and vegetables, on the other hand, advanced about 7 percent, largely due to the marketing of new crops of potatoes and onions; crude rubber rose 5 percent; and "Other farm products," including cotton and wool, increased over 2 percent.

The all-commodity index declined over 1 percent from May to June. The slight increase in the metals and metal products group was more than offset by declines in all other groups except house-furnishing goods which remained unchanged at the May level.

Marked decreases in prices of grains and livestock largely accounted for a decline of 2.5 percent in the farm products group index during June. Quotations were also lower for eggs, hay, milk (Chicago), peanuts, and flaxseed. Higher prices were reported for cotton, lemons, oranges, hops, apples, onions, potatoes, and wool. In the past 2 months grain prices have fallen more than 16½ percent. They were, however, nearly 11 percent higher than a year ago. The farm products group index, 66.2, was 6 percent above the June 1939 level.

Decreases of 4.4 percent for cereal products, 4.2 percent for meats, 1.4 percent for "Other foods," and 0.8 percent for dairy products caused the foods group index to recede 1.5 percent. Prices were lower for flour, oatmeal, crackers, macaroni, beef, mutton, pork, veal, dressed poultry, cocoa beans, canned salmon, pepper, sugar, tallow, vinegar, and most vegetable oils. Quotations were higher for cheese, evaporated and powdered milk, bread (San Francisco), hominy grits, rice, corn meal, canned and dried fruits, canned vegetables, lamb, ham, coffee, codfish, glucose, and lard.

Sharp decreases in prices for hides and skins, together with lower prices for leather and luggage caused the hides and leather products group index to fall 2.1 percent. Shoes and other leather manufactures were steady.

The textile products group index declined slightly largely because of continued weakness in prices for cotton goods, raw silk, silk yarns, burlap, hemp, sisal, and cordage. Clothing advanced fractionally.

Sharp decreases in Pennsylvania crude petroleum and California gasoline caused the fuel and lighting materials group index to drop 0.4 percent to the lowest point reached this year. Anthracite advanced, while bituminous coal declined fractionally.

The slight increase in the metals and metal products group index was a result of higher prices for concrete reinforcing bars, scrap steel, and nonferrous metals, particularly quicksilver, pig tin, pig zinc, babbitt metal, solder, and brass manufactures.

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities,
June 1940, With Comparisons for May 1940 and June 1939
[1926=100]

Group and subgroup	June 1940	May 1940	Change from a month ago	June 1939	Change from a year ago
			Percent		Percent
All commodities	77.5	78.4	-1.1	75.6	+2.5
Farm products	66.2	67.9	-2.5	62.4	+6.1
Grains.....	64.4	71.2	-9.6	58.2	+10.7
Livestock and poultry.....	64.7	69.6	-7.0	69.4	-6.8
Other farm products.....	67.0	65.5	+2.3	58.8	+13.9
Foods	70.3	71.4	-1.5	67.6	+4.0
Dairy products.....	72.2	72.8	-.8	60.0	+20.3
Cereal products.....	77.4	81.0	-4.4	75.9	+2.0
Fruits and vegetables.....	73.9	69.2	+6.8	62.5	+18.2
Meats.....	70.7	73.8	-4.2	75.7	-6.6
Other foods.....	61.3	62.2	-1.4	60.8	+.8
Hides and leather products	99.2	101.3	-2.1	92.3	+7.5
Shoes.....	107.9	107.9	0	101.3	+6.5
Hides and skins.....	81.9	92.2	-11.2	75.3	+8.8
Leather.....	92.4	93.6	-1.3	83.8	+10.3
Other leather products.....	100.0	100.0	0	95.6	+4.6
Textile products	72.6	72.9	-.4	67.3	+7.9
Clothing.....	85.3	85.0	+.4	81.7	+4.4
Cotton goods.....	68.4	69.4	-1.4	64.1	+6.7
Hosiery and underwear.....	61.6	61.3	+.5	60.1	+2.5
Rayon.....	29.5	29.5	0	28.5	+3.5
Silk.....	46.1	47.0	-1.9	43.3	+6.5
Woolen and worsted goods.....	83.7	83.4	+.4	75.6	+10.7
Other textile products.....	74.0	75.7	-2.2	64.2	+15.3
Fuel and lighting materials	71.4	71.7	-.4	73.0	-2.2
Anthracite.....	77.1	76.5	+.8	76.5	+2.1
Bituminous coal.....	95.7	95.8	-.1	95.6	+.1
Coke.....	109.6	109.6	0	104.2	+5.2
Electricity.....	(1)	(1)		77.8	
Gas.....	(1)	84.4		88.9	
Petroleum and products.....	50.0	50.7	-1.4	52.5	-4.8
Metals and metal products	94.7	94.5	+.2	93.2	+1.6
Agricultural implements.....	92.5	92.5	0	93.4	-1.0
Farm machinery.....	93.6	93.7	-.1	94.6	-1.1
Iron and steel.....	94.3	94.2	+.1	95.2	-.9
Motor vehicles ²	94.8	94.8	0	93.0	+1.9
Nonferrous metals.....	81.2	80.3	+1.1	72.9	+11.4
Plumbing and heating.....	80.5	80.6	-.1	79.3	+1.5
Building materials	92.4	92.5	-.1	89.5	+3.2
Brick and tile.....	90.2	90.2	0	91.1	-1.0
Cement.....	90.6	90.5	+.1	91.5	-1.0
Lumber.....	96.0	96.6	-.6	90.7	+5.8
Paint and paint materials.....	85.2	86.0	-.9	82.4	+3.4
Plumbing and heating.....	80.5	80.6	-.1	79.3	+1.5
Structural steel.....	107.3	107.3	0	107.3	0
Other building materials.....	93.0	92.2	+.9	89.5	+3.9
Chemicals and allied products	76.1	76.7	-.8	75.2	+1.2
Chemicals.....	85.1	85.1	0	84.2	+1.1
Drugs and pharmaceuticals.....	82.2	82.0	+.2	77.4	+6.2
Fertilizer materials.....	67.4	70.8	-4.8	66.5	+1.4
Mixed fertilizer.....	72.8	73.0	-.3	72.7	+.1
Oils and fats.....	45.1	46.1	-2.2	46.2	-2.4
Housefurnishing goods	88.5	88.5	0	85.6	+3.4
Furnishings.....	94.9	94.8	+.1	90.0	+5.4
Furniture.....	81.7	81.9	-.2	81.0	+.9
Miscellaneous	77.3	77.7	-.5	73.8	+4.7
Automobile tires and tubes.....	58.2	58.0	+.3	60.5	-3.8
Cattle feed.....	80.0	93.3	-14.3	81.5	-1.8
Paper and pulp.....	91.7	90.7	+1.1	79.9	+14.8
Rubber, crude.....	46.3	44.1	+5.0	34.4	+34.6
Other miscellaneous.....	83.7	84.3	-.7	81.3	+3.0
Raw materials	70.7	72.0	-1.8	67.7	+4.4
Semimanufactured articles	77.9	78.3	-.5	74.1	+5.1
Manufactured products	80.5	81.3	-1.0	79.6	+1.1
All commodities other than farm products	79.8	80.5	-.9	78.4	+1.8
All commodities other than farm products and foods	82.2	82.5	-.4	80.2	+2.5

¹ Data not yet available.² Preliminary revision.

Lower prices for brick, lumber, tung and linseed oils, rosin, turpentine, gravel, plaster, and sand caused the building materials group index to drop 0.1 percent. Prices were higher for cement, yellow pine lath and timbers, shellac, zinc oxide, millwork, and sewer pipe.

Falling prices for fats and oils, calcium chloride, silver nitrate, and fertilizer materials such as ground bone, cottonseed meal, potashes, and tankage resulted in a decline of 0.8 percent in the chemicals and allied products group index. Prices were higher for arsenic, cream of tartar, tin tetrachloride, and caffeine.

The index for the housefurnishing goods group remained unchanged at 88.5 percent of the 1926 average.

In the miscellaneous commodities group, sharp decreases were registered in prices for cattle feed, cooperage, cylinder oils, soap, and wax. Higher prices were reported for crude rubber, automobile tires and tubes, boxboard, paper, and wood pulp.

Index numbers for the groups and subgroups of commodities for May and June 1940, and June 1939 and the percentage changes from a month ago and a year ago are shown in table 1.

Index Numbers by Commodity Groups, 1926 to June 1940

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1939, inclusive, and by months from June 1939 to June 1940, inclusive, are shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936.....	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937.....	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938.....	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939.....	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
By months:											
1939:											
June.....	62.4	67.6	92.3	67.3	73.0	93.2	89.5	75.2	85.6	73.8	75.6
July.....	62.6	67.5	92.5	67.6	72.8	93.2	89.7	74.5	85.6	73.4	75.4
August.....	61.0	67.2	92.7	67.8	72.6	93.2	89.6	74.2	85.6	73.3	75.0
September.....	68.7	75.1	98.5	71.7	72.8	94.8	90.9	76.6	86.6	76.6	79.1
October.....	67.1	73.3	104.6	75.5	73.9	95.8	92.8	77.6	87.8	77.6	79.4
November.....	67.3	72.3	104.0	76.4	74.1	96.0	93.0	77.4	88.4	77.0	79.2
December.....	67.6	71.9	103.7	78.0	72.8	96.0	93.0	77.7	88.5	77.4	79.2
1940:											
January.....	69.1	71.7	103.6	77.9	72.7	95.8	93.4	77.7	87.9	77.7	79.4
February.....	68.7	71.1	102.4	75.4	72.4	95.3	93.2	77.5	88.0	77.3	78.7
March.....	67.9	70.2	101.8	74.0	72.2	95.5	93.3	77.0	88.0	76.9	78.4
April.....	69.4	71.6	101.8	72.9	71.8	94.5	92.5	76.8	88.4	77.7	78.6
May.....	67.9	71.4	101.3	72.9	71.7	94.5	92.5	76.7	88.5	77.7	78.4
June.....	66.2	70.3	99.2	72.6	71.4	94.7	92.4	76.1	88.5	77.3	77.5

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was given in the December and Year 1939 issue of the Wholesale Prices pamphlet.

TABLE 3.—Index Numbers of Wholesale Prices, by Special Groups of Commodities
[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
By years:						By months—Con.					
1926.....	100.0	100.0	100.0	100.0	100.0	1939—Con.					
1929.....	97.5	93.9	94.5	93.3	91.6	August.....	66.5	74.5	79.1	77.9	80.1
1932.....	55.1	59.3	70.3	68.3	70.2	September.....	72.6	81.8	81.9	81.3	82.1
1933.....	56.5	65.4	70.5	69.0	71.2	October.....	72.3	83.1	82.3	82.0	83.8
						November.....	72.4	82.1	82.0	81.6	84.0
1936.....	79.9	75.9	82.0	80.7	79.6	December.....	73.3	82.0	81.7	81.6	83.9
1937.....	84.8	85.3	87.2	86.2	85.3	1940:					
1938.....	72.0	75.4	82.2	80.6	81.7	January.....	73.8	81.7	81.7	81.5	83.9
1939.....	70.2	77.0	80.4	79.5	81.3	February.....	72.7	79.9	81.4	80.8	83.2
By months:						March.....	72.0	79.7	81.1	80.5	82.9
1939:						April.....	73.0	78.2	81.2	80.5	82.5
June.....	67.7	74.1	79.6	78.4	80.2	May.....	72.0	78.3	81.3	80.5	82.5
July.....	67.8	74.4	79.2	78.1	80.2	June.....	70.7	77.9	80.5	79.8	82.2

Weekly Fluctuations

Weekly variations in the major commodity group classifications during May and June are shown by the index numbers in table 4.

TABLE 4.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, May and June 1940
[1926=100]

Commodity group	June 29	June 22	June 15	June 8	June 1	May 25	May 18	May 11	May 4
All commodities.....	77.1	77.1	77.4	77.4	77.8	*77.8	78.5	78.4	78.9
Farm products.....	65.7	65.6	66.8	66.7	67.8	66.8	68.2	69.2	71.3
Foods.....	69.7	70.1	70.2	70.5	70.8	70.7	71.7	71.6	72.5
Hides and leather products.....	99.9	99.6	99.6	99.6	100.5	101.4	102.4	102.2	102.5
Textile products.....	72.0	71.9	71.8	71.9	72.2	72.4	72.6	72.3	71.5
Fuel and lighting materials.....	71.9	71.9	72.2	72.2	72.3	72.4	72.3	72.4	72.3
Metals and metal products.....	94.8	94.8	94.9	94.8	94.7	94.7	94.7	94.5	95.0
Building materials.....	92.4	92.3	92.4	92.1	92.5	92.6	92.7	92.0	92.6
Chemicals and allied products.....	76.0	76.3	76.4	76.4	76.6	76.6	76.8	76.8	76.8
Housefurnishing goods.....	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
Miscellaneous commodities.....	76.9	77.2	77.2	77.0	76.9	77.4	78.2	76.8	76.9
Raw materials.....	70.2	70.2	70.9	70.7	71.4	71.0	72.2	72.5	73.7
Semimanufactured articles.....	77.8	77.9	77.8	77.7	78.0	78.1	78.6	78.2	79.5
Manufactured products.....	80.6	80.6	80.7	80.9	81.1	81.3	81.8	81.5	81.6
All commodities other than farm products.....	79.6	79.7	79.7	79.8	80.0	80.2	80.8	80.4	80.5
All commodities other than farm products and foods.....	82.3	82.4	82.4	82.4	82.5	82.7	82.9	82.5	82.6

Recent Publications of Labor Interest

JULY 1940

Child Labor

Children in a democracy: General report adopted by White House Conference on Children in a Democracy, January 19, 1940, Washington, D. C. Washington, [U. S. Children's Bureau], 1940. 86 pp., charts.

A brief account of this conference was given in the March 1940 Monthly Labor Review (p. 635).

The Federal child-labor amendment. New York, National Child Labor Committee, 1940. 7 pp.

Shows the present status of this amendment, explains the need for the measure, and replies to objections to its ratification.

Welfare of families of sugar-beet laborers: A study of child labor and its relation to family work, income, and living conditions in 1935. By Elizabeth S. Johnson. Washington, U. S. Children's Bureau, 1939. 100 pp., map, illus. (Publication No. 247.)

Based chiefly on interviews with 946 families performing hand labor in the sugar-beet fields of Michigan, Minnesota, Colorado, Nebraska, Wyoming, or Montana. Each of these families had at least 1 child under 16 years of age.

Cost and Standards of Living

Family expenditures for medical care, personal care, and miscellaneous items. Washington, U. S. Bureau of Labor Statistics, 1940. 18 pp., charts. (Serial No. R. 1118, reprint from May 1940 Monthly Labor Review.)

Quantity and cost budgets for four income levels—(1) Family of an executive, (2) family of a clerk, (3) family of a wage earner, (4) dependent families or children; prices for San Francisco, March 1940. Berkeley, University of California, Heller Committee for Research in Social Economics, 1940. 107 pp.; mimeographed.

Quantity and cost budget for a single working woman—prices for San Francisco, March 1940. Berkeley, University of California, Heller Committee for Research in Social Economics, 1940. 10 pp.; mimeographed.

Standards of living in six Virginia counties. By Dwight M. Davidson, Jr., and B. L. Hummel. Washington, U. S. Farm Security Administration, 1940. 116 pp., charts. (Social research report No. XV.)

According to the findings of this survey, the total value of living in 1935, for 46 percent of the 1,730 farm families and 44 percent of the 761 urban families covered by the study, was under \$1,000.

Australian standards of living. By F. W. Eggleston and others. Melbourne, Melbourne University Press, 1939. 193 pp.

Shows the effects of industrial tribunals and tariffs on standards of living and deals specifically with consumption standards in Australia.

Economic and Social Problems

The fat years and the lean. By Bruce Minton and John Stuart. New York, Modern Age Books, 1940. 454 pp., bibliography.

Account of events from the armistice of 1918 to the outbreak of war in 1939, with emphasis on labor problems and interests from a socialistic point of view.

Federal income and estate taxation. (In *Law and Contemporary Problems*, Vol. VII, No. 2, pp. 161-364, Durham, N. C., 1940.)

This symposium presents papers on both sides of controversial tax problems.

Population prospects and problems in New Zealand. By E. P. Neale. Melbourne, Australia, Melbourne University Press, 1939. 15 pp. (Auckland University College reprints, Economic series No. 7.)

Recent population trends are interpreted in their relation to New Zealand's economy and future policy.

Education and Training

Government support of workers' education, with special reference to a study of the relation of private and public agencies in the field of workers' education in Denmark and Sweden. By Eleanor G. Coit. New York, American Labor Education Service, Inc., 1940. 72 pp., bibliography.

Recent developments in workers' education. (In *International Trade Union Movement*, International Federation of Trade Unions, Paris, August-December 1939, pp. 243-319.)

Contains reports on the educational activities of 14 national centers affiliated to or in sympathy with the International Federation of Trade Unions.

Cooperative part-time retail training programs—supervision, coordination, and teaching. By Kenneth B. Haas. Washington, U. S. Office of Education, 1939. 96 pp. (Vocational Division bull. No. 205.)

The writer discusses the needs and aims of education for distributive activities, evaluation of part-time retail training, and preliminary steps in organizing a program of training for retail selling in secondary schools.

Training solutions of company problems: C, Programs designed for development of sales personnel. New York, National Industrial Conference Board, Inc., 1940. 80 pp. (Studies in personnel policy No. 22.)

Training methods for the development of the sales personnel of several large companies are described, and in each case a sketch of the company background and of the ideas of the company in the development of the employees is given. At the end of the study there is a general commentary on sales-training programs which includes a series of questions that an executive might consider when he is outlining plans for his organization.

Employment and Unemployment

Employment and pay rolls in State unemployment compensation systems, 1938. Washington, U. S. Bureau of Employment Security, 1940. 2 vols.; charts. (Employment Security memorandum No. 6.)

Monthly and quarterly data on employment and pay rolls in 1938, made available through unemployment-compensation operations, classified by State and by industry.

Report on partial unemployment. New York, State Department of Labor, 1940. viii, 27 pp.; mimeographed.

Final report and recommendations of a committee appointed in 1937 by the Industrial Commissioner of New York to study partial unemployment in that State and suggest plans for its coverage under the unemployment-insurance system.

The employment and unemployment of young workers. (In *International Labor Review*, Geneva, May 1940, pp. 445-478; also reprinted.)

Alleged "additional workers" in the measurement of unemployment. By Don D. Humphrey. (In *Journal of Political Economy*, Chicago, June 1940, pp. 412-419.)

Criticism of a study entitled "Additional Workers and the Volume of Unemployment in the Depression," published by the Committee on Social Security of the Social Science Research Council (noted in April 1940 *Monthly Labor Review*, p. 1032).

Employment conditions in citrus fruit packing, 1939. Washington, U. S. Women's Bureau, 1940. 24 pp.; mimeographed.

Data on wages and hours from this survey were given in an article in the June 1940 *Monthly Labor Review* (p. 1483).

Family Allowances

Recent developments in compulsory systems of family allowances. By Claire Hoffner. (In *International Labor Review*, Geneva, April 1940, pp. 337-360.)

The political and economic situation at the period in which this article was prepared seemed likely, in the judgment of the author, to reinforce the arguments favoring family allowances and "to give them added importance as a means of dealing with the exceptional needs of the time." Some data for 1939 are included.

Allowances for dependents of men serving in H. M. forces during present war. London, War Office, 1940. 8 pp. (Cmd. 6186.)

Deals chiefly with changes in the scheme for dependents' allowances, announced by the Secretary of War in introducing estimates for the Army on March 12, 1940.

Health and Industrial Hygiene

Health is wealth. By Paul de Kruif. New York, Harcourt, Brace and Co., Inc., 1940. 246 pp.

Account of the campaign of a group of physicians, and of other persons interested in public health, for the development of a national health program.

The national health program and medical care in the United States—selected recent references. Compiled by Ruth Fine. Washington, U. S. Department of Labor Library, June 1940. 25 pp.; mimeographed.

New plans of medical service: Examples of organized local plans of providing or paying for medical services in the United States. New York, Bureau of Co-operative Medicine, 1940. 72 pp.

Thirty plans, representing varied types of medical and hospital service, are described in the pamphlet. The appendix contains a classification of the plans according to groups served, method of payment, agencies in charge, and services available.

Union Health Center, International Ladies' Garment Workers' Union. New York, International Ladies' Garment Workers' Union, 1940. 43 pp., charts.

Report on the medical, health-education, and social-service work of the Center, with data on benefits under the sickness-insurance system, for the year 1939.

A description of the health program of the International Ladies' Garment Workers' Union, as carried out by the Union Health Center, was published in a special article in the October 1939 *Monthly Labor Review* (p. 811), and later reprinted in pamphlet form (Serial No. R. 1009).

A study of college nursing services. By Fern A. Goulding. (In *Public Health Nursing*, New York, May 1940, pp. 319-329.)

This survey of college nursing services in five North Central States shows the number of colleges having nursing services, the scope of the services, and salaries of nurses.

Conference on health and working conditions in Tri-State District, Joplin, Mo., April 23, 1940. Washington, U. S. Department of Labor, Division of Labor Standards, 1940. 43 pp.; mimeographed.

Health hazards of electric and gas welding. By James A. Britton and Eugene L. Walsh. (In *Journal of Industrial Hygiene and Toxicology*, Baltimore, Md., April 1940, pp. 125-151.)

Reviews the literature, gives results of examination of 286 welders, and discusses preventive measures. A bibliography is appended.

Report of a study of the foundry industry in North Carolina. By M. F. Trice and H. F. Easom, M. D. Raleigh, N. C., Board of Health and Industrial Commission, Division of Industrial Hygiene, 1938. 60 pp.; mimeographed.

A study of the dust hazard in 24 foundries of the State. The extent of the hazard in different operations was determined by means of dust counts, and physical examinations were made of 680 workers. From the data presented the maximum dust concentrations allowable for different occupations were determined.

The relative toxicity of lead and some of its common compounds. By Lawrence T. Fairhall and R. R. Sayers, M. D. Washington, U. S. Public Health Service, 1940. 40 pp., bibliography, charts, illus. (Public health bull. No. 253.)

The results of exposure to lead and some of its common compounds were studied in a large number of experimental animals. The lead was administered by mouth, by inhalation, and by intraperitoneal injection. The toxic effect of lead compounds was more evident on inhalation than when administered by mouth or by injection.

Chronic manganese poisoning in an ore-crushing mill. By Robert H. Flinn and others. Washington, U. S. Public Health Service, 1940. 77 pp., annotated bibliography, chart, illus. (Public health bull. No. 247.)

The report deals with the sources and uses of manganese, manufacturing methods, results of an engineering study and a medical study of manganese ore-crushing plants, characteristics of chronic manganese poisoning, and recommendations for control methods.

Protecting eyes in industry. Addresses presented before industrial section, National Society for the Prevention of Blindness, at its annual conference in New York City, October 27, 1939. Washington, U. S. Department of Labor, Division of Labor Standards, 1940. 18 pp. (Bull. No. 37.)

Housing

Housing facilities and expenditures of wage earners and clerical workers. Washington, U. S. Bureau of Labor Statistics, 1940. 18 pp., charts. (Serial No. R. 1101, reprint from April 1940 Monthly Labor Review.)

Housing and welfare. Washington, U. S. Housing Authority, 1940. 53 pp., bibliography.

This survey was conducted by the USHA in cooperation with the Social Security Board. Housing conditions of relief recipients are analyzed and conclusions reached as to what welfare and housing agencies can do to improve the situation.

Mississippi leads South in rural housing. By M. H. Setterfield. (In National Municipal Review, New York, May 1940, pp. 311-314.)

Covers the work of 26 county housing authorities in planning for rehousing approximately 7,000 families.

Immigration and Immigrants

Aliens and the law: Some legal aspects of the national treatment of aliens in the United States. By William Marion Gibson. Chapel Hill, University of North Carolina Press, 1940. xv, 200 pp.

Based upon first-hand study of statutes, treaties, State and Federal court decisions, and awards of arbitral tribunals.

Immigration and national welfare. By Felix S. Cohen. New York, League for Industrial Democracy, 1940. 40 pp.

Industrial Relations

Labor relations in the automobile industry. By William Heston McPherson. Washington, Brookings Institution, 1940. 173 pp. (Institute of Economics publication No. 80.)

This study is based on personal interviews with labor and employer representatives and personnel directors in the industry. It deals with unionization of the workers, employers' associations, collective bargaining, grievance procedure, strikes and boycotts, wages and hours of labor, retirement and discharge, and other matters. The text of the agreement of September 1939 between the Packard Motor Car Co. and the United Automobile Workers of America (C. I. O.) is reproduced in an appendix.

Collective bargaining by American Newspaper Guild. By Abraham Weiss. Washington, U. S. Bureau of Labor Statistics, 1940. 18 pp. (Serial No. R. 1102, reprint from April 1940 Monthly Labor Review.)

Enforcement clauses in union agreements. Washington, U. S. Bureau of Labor Statistics, 1940. 6 pp. (Serial No. R. 1103, reprint from April 1940 Monthly Labor Review.)

Industrial conflict—a psychological interpretation. First yearbook of Society for Psychological Study of Social Issues, an affiliate of American Psychological Association. New York, Cordon Co., 1940. 583 pp.

The papers in this yearbook are grouped under four main heads: Orientation in time and space—industrial conflict and community organization; Personal sources of conflict—individual tensions, needs, and satisfactions; Parties to the struggle—causes of group identification; Objectives and procedures—efforts to eliminate conflicts. An appendix to the volume gives a compilation of significant events in the lives of individual workers and employers which directly or indirectly affected their attitudes toward industrial conflict.

Industrial relations. Papers presented at a conference on industrial relations sponsored by Queens University, April 10–12, 1940. Kingston, Ontario, Queen's University, School of Commerce and Administration, 1940. 50 pp.

The subjects of discussion at this meeting were: Machinery for prevention and settlement of industrial disputes; work of industrial relations section of Queen's University School of Commerce and Administration; wage policy during the war; and training of personnel for industrial occupations. Data from the paper on the last-mentioned subject were published in the July 1940 Monthly Labor Review (p. 27).

Outline of industrial relations policies in defense industries. Princeton, N. J., Princeton University, Industrial Relations Section, 1940. 47 pp., bibliography.

Review of management and production problems involved in the development of essential defense industries. The subjects covered include expansion of management organization, recruitment of production workers, training of skilled and semiskilled workers, wages and hours of work, and employee-management cooperation. The experiences of different companies on different phases of the problems are cited.

Arbetsinställelser och kollektivavtal samt förlikningsmännens verksamhet m. m., år 1938. Stockholm, Socialstyrelsen, 1940. 162 pp.

Annual report on industrial disputes, collective agreements, and conciliation of disputes in Sweden in 1938, including the causes of disputes and their outcome, by districts and industries.

Printed in Swedish with French translation of table of contents and résumé in French.

Industry Reports

Reports of Coal Commission, Great Britain, for years 1938 and 1939. London, 1940. 12 pp.

Review of the Commission's activities under the Coal Act of 1938.

Annual report of Chief Inspector of Mines in India for year ending December 31, 1938. Calcutta, 1939. 202 pp., charts, plans.

The report covers the number of persons employed in coal and metal mines, average output of coal per person, general health conditions in two mining areas, fatal and nonfatal accidents, and a statement of average daily earnings in December 1938 in each important mining field in India.

The railroader. By W. Fred Cottrell. Stanford University, Calif., Stanford University Press, 1940. 145 pp.

Includes chapters dealing, respectively, with the general characteristics of railroading, the technological and social grouping of railroad employees, mobility as affecting the social status of these workers, and their income and its effects on status.

Puerto Rico sugar facts. By Dudley Smith and William M. Requa. Washington, D. C., Association of Sugar Producers of Puerto Rico, 1939. 125 pp., charts.

One section of the report covers employment, wages, and working conditions.

Labor Organization

The Brotherhood of Maintenance of Way Employees. By L. E. Keller. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, June 1940, pp. 8-11; illus.)

The path I trod: The autobiography of Terence V. Powderly. New York, Columbia University Press, 1940. 460 pp.

This autobiography of the leader of the Knights of Labor, written many years ago but only recently released for publication by his widow, gives an intimate version of the development of organized labor in the United States and throws new light on many social and economic problems confronting the Nation from about 1870 to the time of his death in 1924.

Union labor in California, June 1939. San Francisco, Department of Industrial Relations, 1940. 14 pp.; mimeographed.

Summary of replies to an annual questionnaire sent by the California Department of Industrial Relations to labor unions, concerning membership, collective bargaining, paid-vacation provisions in collective agreements, and other matters.

Annual report and balance sheet of South African Trades and Labor Council, for the year 1939. Johannesburg, 1940. In English and Dutch; English section, 47 pp.

This report shows how the Council stands on important labor questions of the day, including legislation in South Africa.

Legislation

Legislation on weekly rest. Washington, U. S. Bureau of Labor Statistics, 1940. 4 pp. (Serial No. R. 1104, reprint from April 1940 Monthly Labor Review.)

The application of anti-trust laws to labor. By Henry Epstein. (In National Lawyers Guild Quarterly, Washington, April 1940, pp. 1-16.)

Trade unions and antitrust laws. Compiled by Julia E. Johnsen. New York, H. W. Wilson Co., 1940. 308 pp. (Reference Shelf, Vol. 13, No. 10.)

This number of the Reference Shelf brings together material presenting the case for and against the liability of labor under the antitrust laws. A summary of the arguments follows, and there is a bibliography of general and pro and con references.

Código del trabajo y su reglamentación [Chile]. Edited by Armando Rojas Valenzuela and Alberto Ruiz de Gamboa A. Santiago, Empresa Editora Zig-Zag, 1938. 1235 pp. Second edition, corrected and amplified.

The Labor Code of Chile with its amendments and regulations, annotated; legal opinions and court decisions based on the Labor Code; legal forms, etc., connected with the labor legislation; and legislation which complements or modifies the Labor Code and that which regulates social insurance. The volume covers legislation through May 9, 1938.

Industrial law. By H. Samuels. London, Sir Isaac Pitman & Sons, Ltd., 1939. xxi, 249 pp.

Deals with those portions of English law which concern employer-employee relations, and provides those engaged in personnel management with a knowledge of the obligations involved in many of the schemes for cooperation between employers and their employees.

Migration and Migratory Labor

Migratory agricultural workers of Atlantic Seaboard. By C. W. E. Pittman. (In Employment Security Review, U. S. Bureau of Employment Security, Washington, June 1940, pp. 3-6.)

Emigrant communities in South China: A study of overseas migration and its influence on standards of living and social change. By Ta Chen. English version edited by Bruno Lasker. New York, Institute of Pacific Relations, Secretariat, 1940. xvi, 287 pp.

Minimum Wage

Minimum-wage legislation as of January 1, 1940. Washington, U. S. Bureau of Labor Statistics, 1940. 19 pp. (Serial No. R. 1106, reprint from April 1940 Monthly Labor Review.)

State minimum-wage laws and orders, 1939. By Florence P. Smith. Washington, U. S. Women's Bureau, 1940. 15 pp. (Supplement to bull. 167.)

Negro Problems

The legal status of the Negro. By Charles S. Mangum, Jr. Chapel Hill, University of North Carolina Press, 1940. 436 pp.

Reviews the statutes and cases in regard to relations between the white and Negro races since the Civil War. One of the chapters of the study deals with labor and allied problems.

The Negro worker in the depression. By Arthur M. Ross. (In Social Forces, Chapel Hill, N. C., May 1940, pp. 550-559.)

Occupational Surveys

Occupational counseling techniques, their development and appreciation. By William H. Stead and others. Published for Technical Board, Occupational Research Program, U. S. Employment Service. New York, American Book Co., 1940. 273 pp., bibliography, charts, illus.

Collection of reports on studies made with a view to getting a better understanding of worker characteristics requisite for different occupations, and to formulating means to estimate or measure these requirements.

Women's full-fashioned hosiery, nylon and silk. Indianapolis, National Youth Administration for Indiana, 1940. 25 pp., bibliography.

Contains information on qualifications for workers, employment opportunities, wages, hours, and labor conditions in the industry. The final chapter includes various job descriptions.

The machine tool industry in Ohio. By Wilbur R. Hanawalt. Columbus, National Youth Administration of Ohio, 1940. 119 pp., bibliography, diagrams, illus.; mimeographed. (Occupational study No. 5.)

Describes the basic features of machine-tool building. The data are based on a survey of 19 plants.

Working with words: A survey of vocational opportunities for young writers. By Lorine Pruette. New York and London, Funk & Wagnalls Co., 1940. 210 pp., bibliography. (Kitson careers series.)

Prepared for persons who like words, who have a gift of expression, and who wish to use this gift for making their living.

Pensions

Provisions of company pension plans as adjusted to Social Security Act—excerpts from recent plans. Princeton, N. J., Princeton University, Industrial Relations Section, 1939. 45 pp., bibliography; mimeographed. (Report No. 56, revised.)

Excerpts from 5 noncontributory plans, 20 contributory plans, 4 plans limited to higher salaried groups, and 2 plans combining annuity with profit-sharing or savings provisions. In addition to the companies whose plans are abstracted, there is a selected list of other companies which had revised their pension plans or inaugurated new ones since enactment of the Social Security Act.

Invalid and old-age pensions handbook, revised to cover provisions of Invalid and Old-Age Pensions Act [Australia] as amended to present date. Canberra, Pensions Department, November 1939. 22 pp.

Widows', orphans', and old-age contributory pensions accounts [Great Britain]. London, Exchequer and Audit Department, 1940. 13 pp.

The total payments for the fiscal year ended March 31, 1939, amounted to £41,326,998, of which £21,604,444 were paid for widows' contributory and non-contributory pensions, £267,082 for orphans' pensions, and £19,455,472 for old-age pensions.

Personnel Management

Public personnel review, Volume 1, Number 1. Quarterly journal of Civil Service Assembly of the United States and Canada. Chicago, April 1940. 92 pp.

This new publication is to be devoted to improving standards and practices in public personnel administration.

The retail personnel primer. New York, National Retail Dry Goods Association, Bureau of Smaller Stores, 1940. 165 pp., bibliography.

Prepared for the practical use of smaller stores.

Recreation

Community recreation programs: A study of WPA recreation projects. Washington, U. S. Work Projects Administration, 1940. 54 pp.

A report of the WPA recreation program, based on a survey of the activities in February 1939, covering 41,359 project employees in 47 States and the District of Columbia. These projects were operated in 7,085 communities, about 85 percent of which had no other organized public recreational activities. The report deals with the number, size, and location of communities included in the program; the types of recreational facilities and the extent of participation in each type; the extent of spectator participation; the work done by project employees in conducting the program; and information concerning the characteristics of the recreation-project employees.

Introduction to community recreation. Edited for National Recreation Association by George D. Butler. New York, McGraw-Hill Book Co., Inc., 1940. 547 pp.

The volume contains discussion of the nature, significance, and extent of recreation, the essential elements in community recreation programs, and organization and administration problems. Recreation activities in several representative cities are described and there is a brief history of municipal recreation in the United States.

Planning for recreation in housing. Washington, U. S. Housing Authority, 1939. 40 pp., plans, illus.

Social Security

Profit sharing and pension plans (their creation and tax effect). By C. Morton Winslow and K. Raymond Clark. New York, Commerce Clearing House, Inc., 1939. 192 pp.

The book is divided into two sections, in one of which various types of pension and profit-sharing plans are described, and illustrations of their tax effect, suggestions for planning, and summaries of representative plans are given; the other gives provisions of Federal tax laws affecting pension, profit-sharing, and stock-bonus plans, and their legislative, administrative, and judicial interpretations, with discussions and comments.

The Monthly Review of the Railroad Retirement Board, Volume 1, No. 1. Washington, U. S. Railroad Retirement Board, May 1940. 33 pp., charts.

The purpose of this Monthly Review, which replaces the Weekly Review previously published by the Railroad Retirement Board, is to provide current information concerning operations under the Railroad Retirement and Railroad Unemployment Insurance Acts.

Bulletin de l'Office Général des Assurances Sociales d'Alsace et de Lorraine. Périgueux (Dordogne), December 1939. 44 pp. (No. 12.)

Annual report on operation of the social-insurance system of Alsace and Lorraine in 1938.

Verslag omtrent den staat der Rijksverzekeringsbank en hare werkzaamheden in het jaar 1938. The Hague, Rijksverzekeringsbank, 1940. 186 pp., folders.

Annual report of the State Insurance Bank of the Netherlands for 1938, including data on insurance against industrial accidents, invalidity, and old age, and other forms of social insurance.

Strikes

Strikes in 1939. By Don Q. Crowther. Washington, U. S. Bureau of Labor Statistics, 1940. 27 pp., charts. (Serial No. R. 1114, reprint from May 1940 Monthly Labor Review.)

One thousand strikes of Government employees. By David Ziskind. New York, Columbia University Press, 1940. 279 pp.

From various sources, the author has obtained information on over 1,000 strikes of navy yard workers, school teachers, public-utility workers, persons employed in municipal hospitals, recreation centers, etc. A brief description of some of these strikes is given, together with an analysis of causes and legal aspects.

Unemployment Insurance and Relief

Comparison of State unemployment compensation laws as of March 1, 1940. Washington, U. S. Bureau of Employment Security, 1940. 141 pp. (Employment Security memorandum No. 8.)

In this report the principal provisions of the 51 State unemployment compensation laws as revised and amended to March 1, 1940, are summarized and compared. During the regular legislative sessions of 1939, 46 States revised these laws and since January 1940 two other States have done likewise. Most States provided for the removal of railroad workers from State coverage because of the enactment of the Federal Railroad Unemployment Insurance Act of June 1938 and, as a result of their experience, many of the States endeavored to simplify the benefit provisions. The laws are analyzed by subject, and after each subdivision the States having the given provision are listed.

An exploratory memorandum on partial unemployment benefits in State unemployment compensation systems. By J. J. Joseph. Washington, Social Science Research Council, Committee on Social Security, 1940. 105 pp. (Pamphlet series No. 4.)

The Unemployment Assistance Board [Great Britain]: A case study in administrative autonomy. By John D. Millett. London, George Allen & Unwin, Ltd., 1940. 300 pp.

The study deals with the constitutional and administrative position of the Unemployment Assistance Board in the Government of Great Britain. The Board's relations with the Ministry of Labor and the controls retained by Parliament are examined, and the arguments advanced in favor of the curious position of the Board, in which it is removed from direct Parliamentary control, are analyzed.

The unemployment services. A report prepared for the Fabian Society by Polly Hill. London, Geo. Routledge & Sons, Ltd., 1940. 226 pp.

Analysis of the existing unemployment-relief system in Great Britain, showing its shortcomings and presenting constructive proposals which the writer believes could be made effective by a Labor Government in its first term of office.

Vacations With Pay

Trends in company vacation policy. New York, National Industrial Conference Board, Inc., 1940. 19 pp. (Studies in personnel policy, No. 21.)

A study of the vacation policies of 495 business and industrial establishments, most of which cooperated in a similar study made about a year earlier. The report shows the trend toward revising and liberalizing vacation policies continued in 1939 and 1940.

Wages and Hours of Labor

Wages, hours, and employment conditions in United States, 1934-1939. (In Conference Board Economic Record, National Industrial Conference Board, Inc., New York, March 28, 1940, pp. 115-152.)

The tables in this report bring up to date and, in certain instances, revise various series on wages, hours, and employment in the United States previously published by the National Industrial Conference Board.

Report of salary survey of book publishing industry, conducted by Book and Magazine Guild. New York, Book and Magazine Guild, Local 18 of United Office and Professional Workers of America, 1940. 15 pp.

This was the first survey, according to the report, ever made of salaries in the book-publishing industry. It covered the situation in 36 representative New York City establishments in early 1940. The report includes comparative data on newspaper salaries.

Hourly earnings in leather industry, September 1939. By P. L. Jones, H. O. Rogers, O. R. Witmer. Washington, U. S. Bureau of Labor Statistics, 1940. 24 pp. (Serial No. R. 1108, reprint from April 1940 Monthly Labor Review.)

A more detailed report is being published as Bulletin No. 679 of the Bureau of Labor Statistics.

Weekly earnings of male and female wage-earners employed in manufacturing industries of Canada, 1934-36. Ottawa, Dominion Bureau of Statistics, 1940. 70 pp., chart.

Extent and causes of differences in hourly earnings. By Jacob Perlman. (In Journal of American Statistical Association, Washington, March 1940, pp. 1-12.)

The five-day week in city employment: A summary of experiences of 14 cities with the five-day week and with monthly or annual pay for laborers. (In Public Management, Chicago, May 1940, pp. 131-135.)

General Reports

Investigaciones sociales [Argentina]. Buenos Aires, Departamento Nacional del Trabajo, 1940. xi, 63 pp., charts

Statistical report on cost of living, prices of articles of prime necessity, wages and hours, employment, strikes, membership in labor unions, union activity, collective labor agreements, and housing, in Argentina, through 1939.

Töökaitse Eestis, 1938. Tallinn, Sotsiaalministeerium, 1940. 60 pp., diagrams, illus.

Summary of reports of the labor inspectors on labor conditions in Estonia in 1938, including information on legislation for labor protection, activities of mediators of industrial disputes, and ventilation of workshops and other sanitary measures.

Printed in Estonian with résumé in French and French translations of table of contents and table heads.

Constitución política de la República [El Salvador]. (In Diario Oficial, Vol. 126, No. 15, pp. 149-158, San Salvador, January 20, 1939.)

The chapter on family and labor includes regulation of work of women and minors, practice of professions, settlement of labor disputes by conciliation and arbitration, and preference to native Salvadoreans in civil-service appointments.